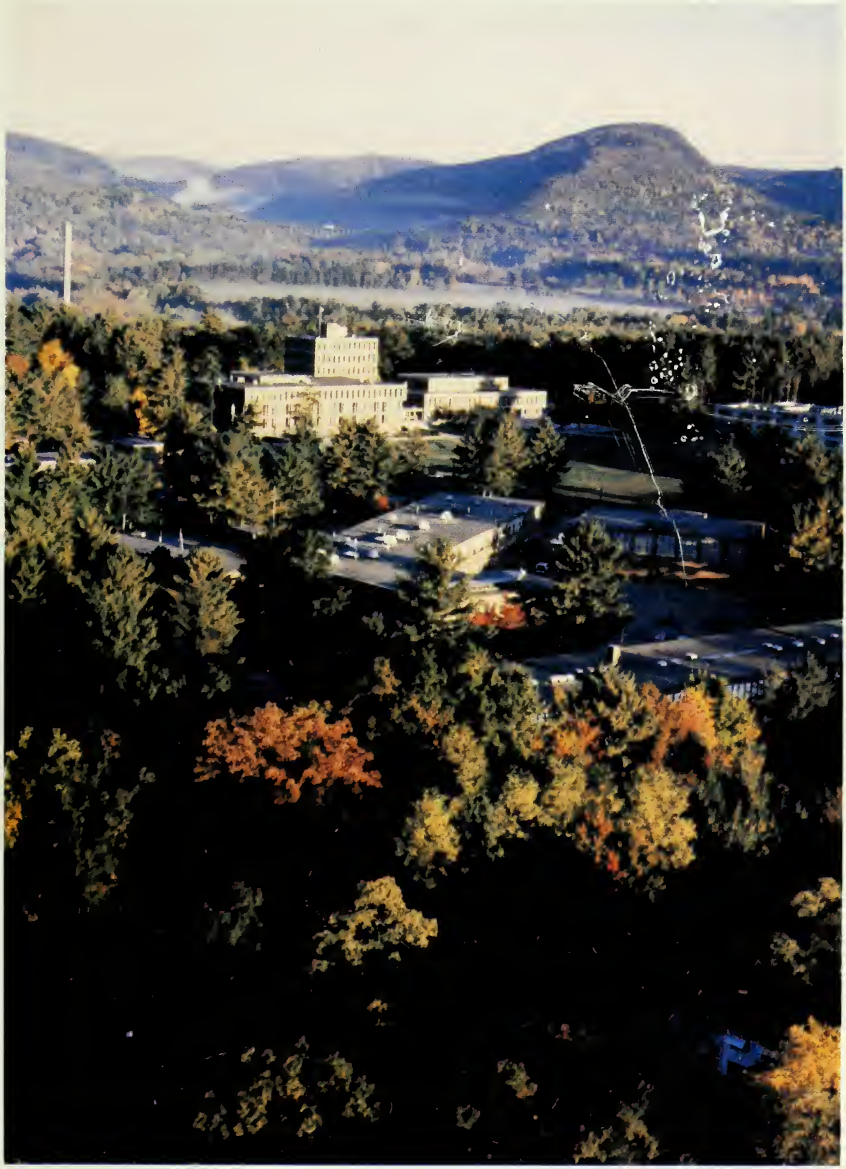
WESTFIELD STATE COLLEGE

Undergraduate Catalogue

Celebrating Our Sesquicentennial



Digitized by the Internet Archive
in 2014

https://archive.org/details/westfieldstateco1987west

WESTFIELD STATE COLLEGE

UNDERGRADUATE CATALOG
1987-89

This catalog is a guide for information and not a contract. The College reserves the right to change requirements for degrees, prerequisites, fees, scheduling, and related matters. For information on graduate courses, please refer to the Westfield State College Graduate Studies Bulletin.

WESTFIELD, MASSACHUSETTS 01086 **TELEPHONE: (413) 568-3311**

TABLE OF CONTENTS

WELCOME TO WESTFIELD STATE COLLEGE 6
Facilities, A to Z
Library Facilities
Historical Notes
Educational Mission
Division of Graduate Studies and Continuing Education
Policy of Non-Discrimination
Accreditation

THE ADMISSION PROCESS 14
Freshman Admission
Transfer Admission
Foreign Student Admission
Special Students
Advanced Standing
Readmission

FINANCIAL AID 17
Policy and Criteria
Federal Programs
State Programs
Private Programs
Institutional Programs

UNDERGRADUATE TUITION, FEES, AND EXPENSES 21
Application Fee
Residence Hall Room Reservation Advance Deposit
Damage Deposit Policy
Tuition
Payment of Tuition and Fee Bills
Schedule of Estimated Costs, 1986-1987
Music Lesson Fees
Refunds

STUDENT SERVICES 29
Orientation
Office of Minority Affairs
Housing
Dining Facilities
Health Services
Athletics
Co-curricular Eligibility

Career Counseling Center
Placement Services
Center for Psychological Services
Veterans Services
Privacy and Confidentiality Regulations
The Family Educational Rights and Privacy Act

ACADEMIC LIFE: PROCEDURES AND POLICIES **37**
Academic Advising
Special Opportunities
Scholastic Requirements
Academic Honors
Procedures for Program Changes
Academic Honesty Policy
Assistance Programs
Class Attendance
Procedure for Graduation
Procedure for Withdrawing from College
Certification for Teaching
Requesting Transcripts
Academic Freedom and Responsibility

EARNING A DEGREE **51**
Courses of Study
Course Pattern for a Degree
General Core of Studies

DEPARTMENTAL PROGRAMS **55**
THE BOARD OF TRUSTEES **165**
THE FACULTY **167**
THE ADMINISTRATION **165**
CAMPUS MAP **173**

WELCOME TO WESTFIELD STATE COLLEGE

Celebrating our Sesquicentennial

As at its founding 150 years ago, the heart of the Westfield State College education is commitment to excellence in the liberal arts. Westfield State is a comprehensive, four-year college, established in 1838 as the nation's first public coeducational institution for teacher preparation. Today, as a Westfield State College student, you can chose from among many programs, each allied to the liberal arts tradition, opening doors to a variety of professional careers.

Choice is the hallmark of the liberal arts education. Westfield State awards the bachelor's degree in twenty-two major fields (listed on page 51), offering an equal number of minors and additional concentrations in specific academic areas. The curriculum at Westfield State will allow you to explore different subjects before making a commitment to a major. Most of our 3,000 undergraduates decide to major in one of the liberal arts.

What can you expect from a Westfield State College liberal arts education? Options. Discoveries. Awareness. The ability to communicate, to investigate, and to analyze. Professionalism: training eventually becomes outdated, but learning to learn is the best preparation for employment, and for life. Our admission standards are high; most of our students have proven themselves serious about learning before they enroll. Their seriousness is matched by the dedication of our full-time faculty, of whom 70% hold the doctorate or appropriate highest degree. Classes are small, so that you will become directly involved in discussions and projects.

If you are willing to take advantage of them, Westfield State presents a surprising range of unconventional opportunities for learning. While fieldwork in many courses routinely takes our students anywhere from local banks to Long Island Sound, internships widen their horizons even further. Recently, Westfield State students have undertaken internships with such diverse organizations as a television studio in Bermuda; Massachusetts Mutual Life Insurance Company; a center for the arts in Washington, D.C.; the Connecticut Valley Historical Museum; the Springfield Symphony Orchestra; and General Electric.

Our students participate in excange programs abroad, and also nationally through arrangements with universities in Alaska, Arkansas, Mississippi, Oklahoma, South Dakota, and Wisconsin. Through your academic advisor you can find out more about structuring a program of study which not only may incorporate such experiences, but also will assure you of achieving your educational goals.

Moreover, as a primarily residential college, Westfield is unique among the state colleges in Massachusetts. Over half of our undergraduates live on campus, making the Westfield State College education a round-the-clock experience. There are seven residence halls, one for men, two for women, one coeducational, and an

apartment complex chiefly for juniors and seniors. Even if you are a commuting student, you can draw upon the wealth of clubs, events, and sports generated on a campus which serves as home to over 1700 students.

Westfield State students are an active lot, from performing in the Chorale or Wind Symphony, to working with the *Owl* (the student newspaper) or WSKB campus radio. Over 85% of our students join in nearly 30 different intramural sports. The Student Senate, the Campus Center Board of Governors, the student Judicial Board, and the Dormitory Councils provide forums for self-governance. At Westfield State you will always find dances, exhibitions in the gallery, concerts, lectures, plays, musicals, films, and off-campus excursions. There are no national Greek-letter fraternities and sororities at Westfield State, but there are over 40 clubs and organizations maintained by students, for students. You will learn to establish priorities for yourself by finding a balance between studying and involvement in campus life.

The location of the campus offers dual advantages to students. Surrounded by groves of tall pines on land formerly known as Juniper Park, fifteen brick buildings form the center of the modern, 227-acre campus. Though the college is set in a pleasant residential neighborhood, Westfield's shopping and commercial areas are freely accessible through an arrangement for student bus passes with the Pioneer Valley Transit Authority (PVTA). And while the lively city of Springfield (and seven other colleges belonging to the Cooperating Colleges of Greater Springfield) is only minutes away, so are state forests, ski slopes, and the Berkshire mountains.

We encourage every prospective student to come to our campus. Although it is no substitute for a visit, this catalogue serves as an introduction to Westfield State College. We hope that you will regard it also as an invitation to learning.

Officers of the Sesquicentennial Class of 1988

FACILITIES, A to Z

Art Gallery
Baseball diamond
Campus Center
Dever Auditorium
Electron microscope
Fine arts studios
Greenhouse
Health Services
Interfaith Center
Juniper Park laboratory school
Kitchens in student apartments
Lounge for commuters
Music practice rooms
New 4500 seat capacity bleachers
Outdoor track
Placement Office & Career Counseling
Quads in Scanlon Hall
Residence Halls:
- Conlin
- Davis
- Dickinson
- Lammers
- Scanlon
- Seymour
- Welch

Swimming Pools (indoor and outdoor)
Television studio
Urban Education program
VAX 11/750 minicomputer system
Wilson Hall Auditoriums
Xylophones
Yogurt at the Campus Center Snack Bar
Zones for commuter parking

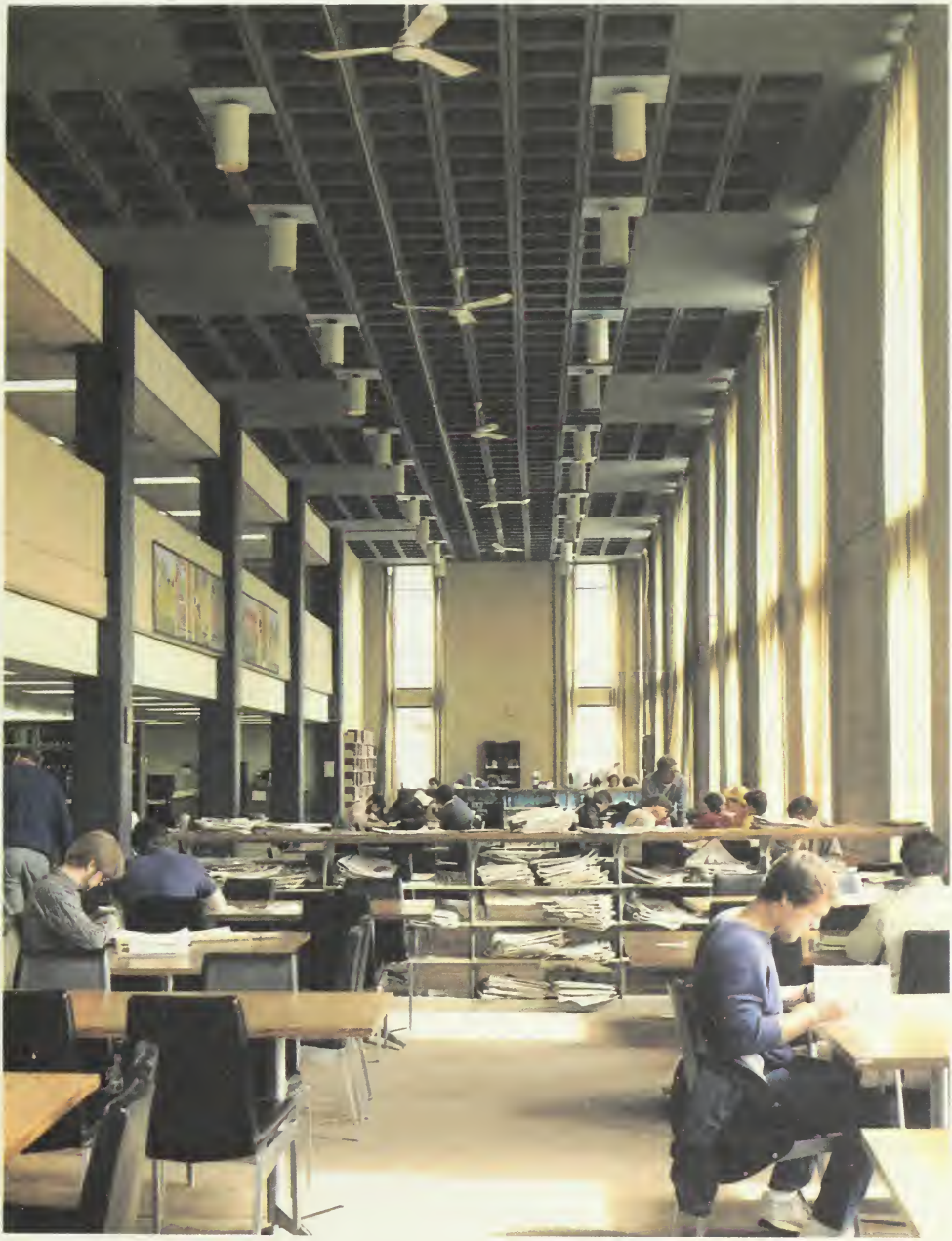
LIBRARY FACILITIES

The Governor Joseph B. Ely Library/Campus Center building opened in December 1971. The Library's collection numbers more than 142,000 volumes and current and backfiles of over 800 periodical titles and newspapers. Over 6,500 reels of microfilm and 300,000 units of microfiche and microcard are serviced by microform readers. Pamphlets, newsletters, and maps complete the collection.

PRIVILEGES AT AREA LIBRARIES

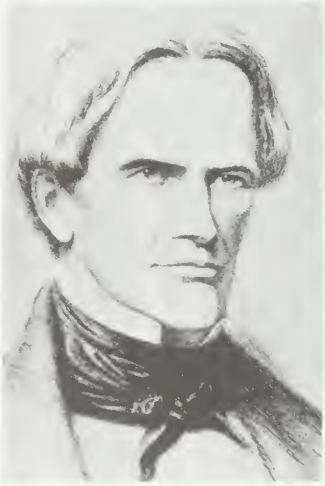
Through a cooperative arrangement with other libraries in the area, Westfield State College students may register and borrow materials at the following libraries: American International College, Bay Path Junior College, College of Our Lady of the

Elms, Holyoke Community College, Springfield College, Springfield Technical Community College, Springfield City Library, Western New Englan College, and the Western New England Law Library. Students may also borrow from the Westfield Athenaeum and University of Massachusetts libraries.



HISTORICAL NOTES

Horace Mann, secretary of the Massachusetts Board of Education and "Father of Education" in the United States, urged the Commonwealth in 1838 to appropriate funds to establish the nation's first two Normal Schools (the early name for teacher's colleges), one in Barre and one in Lexington. Twelve women and eight men became the first students at the Barre site, making this the nation's first public coeducational school for teacher preparation, from which Westfield State College grew.



Dr. Samuel P. Newman, a distinguished professor of rhetoric and political economy from Bowdoin College, became the first principal. He welcomed "the opportunity to contribute to the welfare and improvement of many people rather than to confer high privilege on a few." So began Westfield State's tradition of providing a quality education to all the citizens of the Commonwealth.

Upon Newman's death in 1844, the school moved from Barre to Westfield because of the accessibility and beauty of the community. Horace Mann urged the legislature to provide funding for a new building, supplemented by contributions from the poet Henry Wadsworth Longfellow. The Reverend Emerson Davis, who had been instrumental in bringing the school into his community, became the first principal at Westfield. Students were educated in the liberal arts and sciences such as Algebra, Greek, Psychology, and English Literature.

The school's faculty and graduates always have been distinguished in their fields. In the 1890's they designed the educational system for the Imperial Court of Japan. Between 1860 and 1890, most black freedmen who undertook a post-secondary education went to Westfield, as did most women physicians prior to 1910. What served in those days as the main building of the school is currently in use as the Westfield City Hall.

By 1930 a four-year degree course was firmly established at Westfield, and two years later the legislature designated it as one of the State Teachers Colleges. Over 4,000 students had graduated from the college at the end of its first hundred years.

When the college's downtown quarters became inadequate, the city of Westfield conveyed much of the acreage of Juniper Park to the Commonwealth for development as a new campus, dedicated in 1956. Under the Willis-Harrington Act, the name became Westfield State College in the mid nineteen-sixties, opening the way for an expanded curriculum. During the following decade, graduate programs and the Division of Continuing Education were instituted.

A historian of the College once wrote: "With the present exploding growth in progress one can only speculate as to what the record may be upon the occasion of the 150th Anniversary." With that occasion imminent, the rate of progress at Westfield State College increases apace, through continual review and development of the curriculum; receptivity to the latest in technology; and construction of a new dining commons, residence hall, and athletic facilities.

EDUCATIONAL MISSION

As a public institution, the College is continually in the process of developing and fulfilling the legislative mandate of the Commonwealth of Massachusetts that "the state colleges shall provide educational programs, research, extension and continuing education services in the liberal, fine, and applied arts and sciences and other related disciplines through the master's degree level." Westfield State's service to both the Commonwealth and Western Massachusetts also represents the College's response to meet changing social, cultural, economic, and demographic needs.

Westfield State College provides educational opportunities regardless of race, color, creed, sex, age, handicap, national origin, or economic status.

THE DIVISION OF GRADAUTE STUDIES AND CONTINUING EDUCATION

The Division of Graduate Studies and Continuing Education offers five graduate degrees including the Master of Art in English and Psychology, the Master of Science in Criminal Justice, the Master of Education in 12 different concentrations and the Certificate of Advanced Graduate Study in Educational Administration, Supervisor/Director of Reading, Supervisor/Director of Special Education and Curriculum Supervisor. The Bachelor of Science in Education, the Bachelor of Art and the Bachelor of Science degrees are offered in every major available to Day Division students.

Unique to the Division is the Second Bachelor's Degree Program as well as the Post-Baccalaureate Teacher Certification Program. Also available to students are eighteen semester hour certificate programs in either Computer Studies, Computer Applications in Education, Marketing, Writing, Social Work or Women's Studies.

Professional programs in the Credit Free Division include Paralegal Studies and the Administrative Assistant Certificate. Personal enrichment courses are also offered and include such popular classes as How to Purchase Real Estate for Profit, Home Landscaping, Lotus 1-2-3, dBase III, Computers for Kids, Taxidermy and many others.

The Division offers over 100 courses in two 6-week summer evening sessions and two 4-week day sessions including core courses and electives. These courses are available to Day and Evening students. There are a wide variety of credit-free offerings also available.

The Division operates on a self-supporting basis and all charges and fees are structured to maintain the program as efficiently as possible while sustaining quality academic standards. Financial Aid is available including PELL grants and Guaranteed Student Loans for undergraduates, and Graduate Assistantships, Math/Science Scholarships and GSL loans for graduate students.

Academic advisement is available to all students by appointment. More information is available by contacting the Division at (413) 568-1992 or by stopping in Parenzo 108.

POLICY OF NON-DISCRIMINATION

Westfield State College, both as an employer and as an educational system, is committed to the principles of non-discrimination and equal opportunity for all persons. These commitments are actively pursued in all aspects of both campus and community relationships.

Westfield State is committed to a policy of affirmative action in its educational programs, activities and employment practices.

The College maintains and promotes a policy of non-discrimination on the basis of race, religion, color, sex, age, handicap, marital status, or national origin. This policy incorporates by reference the requirements of Federal Executive Orders 11246 and 11375 as amended; the Civil Rights Act of 1964 as amended; Title IX of the Educational Act of 1972; Section 503 and 504 of the Rehabilitation Act of 1973; Section 402, Vietnam Era Veterans Readjustment Assistance Act of 1974; and pertinent Laws, Regulations and Executive Directives of the Commonwealth of Massachusetts, including regulatory procedures set forth under Chapter 820 of the Acts of 1973; and other applicable state and federal statutes.

ACCREDITATION

Westfield State College is accredited by the New England Association of Schools and Colleges. The teacher education programs are accredited by the National Council for Accreditation of Teacher Education and also by the State Department of Education, Bureau of Teacher Certification.

THE ADMISSION PROCESS

FRESHMAN ADMISSION

Westfield State College accepts both full-time and part-time students. Part-time students apply through the Division of Graduate Studies and Continuing Education. Admission to Westfield State College is selective. The minimum entrance requirements specify that the prospective student have a high school diploma or its equivalent. In addition, all students must show satisfactory performance on the College Board Scholastic Aptitude Test and submit the Student Descriptive Questionnaire. For general acceptance to the College the applicant's high school grades, rank in class, and grade point average, along with SAT scores are factored into a formula which is designed to predict how well the student will perform academically in the freshman year at Westfield State College. Each case is reviewed individually.

The Massachusetts Board of Regents of Higher Education has mandated that the Admissions Eligibility Index and the Coursework Unit Requirements together will determine the minimum eligiblity of recent high school graduates applying to a Massachusetts State College.

The Eligibility Index is comprised of a sliding scale based on high school class rank and S.A.T. scores. Some state colleges have adopted higher eligibility indices than the minimum required by the Board of Regents. Westfield State College is such an institution. Students should consult the Admission Staff for specific information.

Beginning with the 1987-88 academic year, entering freshmen are required to have completed the following High School Coursework Unit Requirements:

College Preparatory English	4
College Preparatory Math	3
College Preparatory Natural and Physical Science (with lab)	2
College Preparatory Social Sciences	2
College Preparatory Foreign Language	2
Electives (from the above list and/or Computer Science, Arts, Humanities)	3

Some major programs at Westfield State College, such as Computer Science, require additional and/or specific Coursework Units. Students should consult the College Admission Staff for details.

The prospective student must submit an admission application after the opening of the Senior year in high school and the secondary school record must be submitted according to the directions on the application.

Evidence of a recent physical examination from the applicant's personal physician is mandatory for admission to the College. Student athletes must present medical records to the athletic department; these records will also serve to fulfill the physical exam requirement for admission. If the applicant is applying as an Art major,

he/she must submit a portfolio; if applying as a Music major, he/she must have an audition with the Music Department. A personal visit is recommended for all applicants to the College.

Westfield State College has a "rolling admissions" policy. Candidates are notified of their acceptance on a continuing basis beginning about January 1.

TRANSFER ADMISSION

If a student has completed twelve semester or eighteen quarter credits at another college or university, he or she may be eligible for entrance to Westfield State College as a transfer student.

Applicants for transfer to Westfield State College will be evaluated on the basis of their previous college academic record. Whenever possible, degree credit will be granted for course work completed at accredited institutions of higher education. Courses which do not fit the degree programs may be counted as fulfilling the open elective requirements of the four year curriculum. The transfer student will be required to fulfill the same degree requirements as any other student. A student transferring from a two-year institution is entitled to transfer for credit toward the bachelor's degree no more than the two years of credit which constitute the requirement of the associate degree program taken as a unit.

A student who has completed the general requirements of one State College prior to transferring to another State College is not obligated to meet additional or different general education requirements of the receiving college. A student must successfully complete one year as a full-time student (30 credits) to receive a baccalaureate degree from Westfield.

The number of transferees accepted will be determined by existing vacancies in the various degree programs and the number of applicants deemed eligible.

Eligibility usually means a cumulative average of 2.0 or better. Once admitted to Westfield State College, the transfer student assumes a new cumulative average that is subject to academic policies established by the College.

COMMONWEALTH TRANSFER COMPACT

In the Commonwealth of Massachusetts, an Associate Degree from any two year college signatory to the Commonwealth Transfer Compact is honored as a unit and is defined as the equivalent of 60 credit hours of undergraduate college level study including:

(A) 6 hours of English — communication
(B) 9 hours of behavioral — social sciences
(C) 9 hours of humanities — fine arts
(D) 9 hours of mathematics — sciences
(E) All credits to be on a college level

Westfield State College honors this policy and will award, upon acceptance, the full number of credits earned while enrolled in the Associate Degree program.

FOREIGN STUDENT ADMISSION

Any foreign student seeking admission to the College must fulfill the requirements established for freshmen or transfer students. The Test of English as a Foreign Language (TOEFL) also is required of each applicant. Information on this requirement can be obtained from either the College Entrance Examination Board or the Educational Testing Service. All applications for admission from foreign students must be received by January 1 for entrance the following September. No foreign applicants are eligible for admission in the January entrance period.

SPECIAL STUDENTS

Special students are those students accepted as non-matriculants.

ADVANCED STANDING

Honors courses, programs of independent study, Advanced Placement, College Level Examination Programs (CLEP), and advanced standing credit earned at another accredited institution of higher learning usually will be accepted at Westfield State.

READMISSION

Application for readmission should be filed by June 1 for the first semester and December 1 for the second semester.

A student who is dropped from Westfield State College because of academic failure may apply for readmission after he has taken at another accredited college enough courses in an approved program to raise his cumulative quality point average to the level required of members of the class to which the student is to be assigned. The student must consult with the Registrar for approval of a scholastic program which will be acceptable for readmission.

A student will receive credit for all courses in which a passing grade is received. Grades of D, however, will not be accepted from a transcript that shows a total Q.P.A. of less than 2.0.

The readmission process for students who formally withdraw from the College for reasons other than academic failure requires reapplication for admission through the Admissions Office.

A student who elects to withdraw temporarily (leave of absence) must inform the Registrar of his/her intention to return eight (8) weeks prior to the beginning of the semester of return.

FINANCIAL AID

The primary purpose of the Financial Aid Office at Westfield State College is to insure that no student is unable to pursue his or her educational goals for lack of financial resources. Westfield State College participates in a wide variety of federal, state and private programs. Assistance can be in the form of gift aid (grants and scholarships) and self-help programs (loans and work study). The Financial Aid Office Staff is available to assist you throughout the financial aid process and looks forward to working with you.

POLICY AND CRITERIA

The policy and criteria for awarding financial aid are as follows:

1. The philosophy of financial aid is that the family has the responsibility to meet as much of the educational costs of their children as is reasonably possible. Financial Aid is a supplement to the family resources.
2. The Financial Aid form (FAF) must be completed and mailed to the College Scholarship Service before March 1st. The FAF can be obtained from the Financial Aid Office at Westfield State College or from a High School Guidance Office.
3. In addition to the FAF, the Westfield State College Financial Aid Application, appropriate parent and student income verification and Pell Grant Student Aid Reports must be submitted to the Financial Aid Office by April 1st. Students completing their files by the deadline will receive priority consideration. Files completed after the deadline will be awarded on a funds available basis.
4. In order to receive financial aid a student must be maintaining satisfactory academic progress. Satisfactory academic progress is defined as the successful completion of 24 credit hours of course work for each year of full time attendance, 18 credit hours for ¾ time attendance, and 12 credit hours for half time attendance.
5. Financial aid awards are not renewable. You must reapply each year.

FEDERAL PROGRAMS

Westfield State College participates in six federal programs:

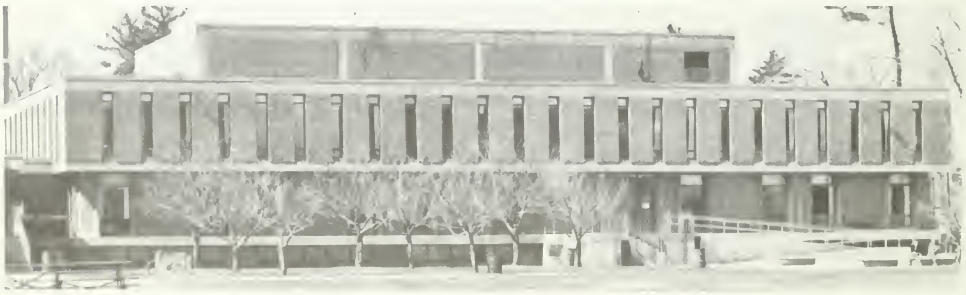
1. Pell Grant
   This is an entitlement program designed to meet the needs of eligible undergraduate students. It is considered the floor of a financial aid package. It is a grant and does not have to be repaid. Awards may be as high as $2100 for an academic year.
2. Supplemental Educational Opportunity Grant (SEOG)
   This is a grant designed for the most needy undergraduate students. Awards may range from $200 to $2100 depending upon the amount of money the College has to award.

3. National Direct Student Loan (NDSL)
   This is a long term low interest (5%) loan that must be repaid. Undergraduate and graduate students enrolled on at least a half-time basis, who demonstrate financial need, are eligible.
4. College Work Study (CWS)
   This is designed to provide undergraduate and graduate students an opportunity to work part-time while attending school. They are usually employed on campus and work between 5-15 hours per week.
5. Guaranteed Student Loan (GSL)
   This is a long term low interest (8%) loan that must be repaid. Undergraduates enrolled on at least a half-time basis are eligible to borrow up to $2500 per academic year provided they demonstrate financial need. Graduate students enrolled on at least a half-time basis are eligible to borrow up to $5000 per academic year provided they demonstrate financial need. Loan applications are available at your local bank or credit union. Repayment is deferred until the student ceases to be enrolled half-time.
6. Parent Loans (PLUS)
   Parents of dependent students, independent students and graduate students may borrow through this program. Loans may range as high as $3000 per academic year. Interest is 12% and repayment begins 45 days after the loan is disbursed. Applications are available at participating banks and credit unions.

STATE PROGRAMS

Westfield State College participates in 3 State programs:

1. Massachusetts State Scholarship
   Awards are based on financial need and are applied for by filing the Massachusetts Financial Aid Form before March 1st. At a state college the maximum award is $500 for an academic year. This program is administered by the Massachusetts Board of Regents of Higher Education.
2. Adult Learners Grant Program
   This is a grant awarded by the Financial Aid Office to eligible undergraduates enrolled at least part-time. Priority will be given to AFDC recipients and to other adult learners.
3. Massachusetts Educational Employment Program (MEEP)
   This is designed to allow eligible students to work part time in a job that relates to their major. It is similar to the College Work Study Program.



PRIVATE PROGRAMS

HORACE SMITH SCHOLARSHIPS

Applications may be obtained from the Horace Smith Foundation in the SIS Building in Springfield, Mass. in the Spring. Deadline for submitting application is June 15 for the college students and July 1 for high school seniors. Scholarships consist of loans and grants to graduates of Hampden County High Schools. Loans are similar to NDSL except there are no cancellation features.

JAMES Z. NAURISON SCHOLARSHIPS

Applications are available in the Spring of each year either from the Third National Bank of Hampden County in Springfield or the Financial Aid Office. Students applying for financial aid are expected to apply for this scholarship if eligible. Only residents of Hampden, Hampshire, Berkshire, Franklin Counties or Enfield/Suffield, Conn. are eligible to apply. Deadline for application is May 1.

INSTITUTIONAL PROGRAMS

The following scholarships are awarded annually. Scholarships are credited toward college expenses in the following September, and must be utilized during that school year. All, except the Kevin Ryan Scholarship, are available only to undergraduates already matriculating at Westfield State College.

Frank Stanley Beveridge Scholarship: Award based on academic performance and contributions to college and/or community. Must have completed 15 S.H. (freshman), 45 S.H. (sophomore) and 75 S.H. (junior). All recipients must have a 3.5 cumulative average or higher.

Loretta MacDonald Scholarship: Recipient must be a resident of Scanlon Hall for one year and intend to reside in Scanlon the following academic year as indicated on the dorm deposit form. Minimum cum 2.0. Award based on contributions to the Scanlon Hall Community.

Gerald A. Mazza Memorial Scholarship: The recipient must have made an outstanding contribution to theater at Westfield State College and *preferably* be entering the senior year. Any student regardless of academic major will be eligible to apply for the scholarship.

Francis J. Pilecki Scholarship: Awarded to students in good academic standing, ineligible for state and federal financial aid, who cannot continue their education without financial assistance.

Julia S. Rockwood Scholarship: Award based on academic performance (preferably elementary education — kindergarten).

Kevin Ryan Scholarship: Awarded to entering male freshman graduate of Springfield High School who participated in varsity sports, preferably baseball. It is antici-

pated that he will participate in college sports and preferably be a math major. Scholarship is renewable.

Edward J. Scanlon Scholarship: Award based on contributions to the college community.

William T. Spears/Mary-Bernadette H. Handy Memorial Scholarship: Awards to one male and one female student annually available to all juniors nd seniors in good standing. Students majoring in Criminal Justice or Social Science, as well as student athletes, are especially encouraged to apply.

Scholarship Trust Fund: Award based on contributions to the college community.

Student Senate Scholarship: Award based on contribution to the student body. Seniors must have been accepted for graduate school. Two scholarships to each class.

Westfield State College Scholarship: Award based on contributions to the college community.

UNDERGRADUATE TUITION, FEES AND EXPENSES

The schedule of fees and tuition, methods of payment and refund policies are valid at the time of publication of the catalog and subject to change as required without advance notice.

Those students enrolled for twelve or more academic credits per semester are considered to be full-time students. Part-time students, those students enrolled in less than twelve academic credits per semester, may take courses on a space available basis only.

APPLICATION FEE

A non-refundable application fee of $10.00 is required of all applicants who are Massachusetts residents (not applicable to tuition). The application fee is $40.00 for out-of-state applicants.

RESIDENCE HALL ROOM RESERVATION ADVANCE DEPOSIT

All residents (entering transfer and returning students) must pay a $50. Room Reservation Deposit prior to occupancy. The resident must submit to the College $50. and a signed agreement to be considered for an assignment. Payment of the deposit and the resident's receipt of an agreement signed by the College will reserve a space until the semester room fee is due. If the semester room fee is not satisfied by the due date, the $50. deposit will be forfeited and the space reassigned. Upon completion of the Fall Semester residency, the $50. Room Reservation Deposit will be applied toward the Spring Semester Room Fee.

Receipt of an Occupancy Agreement signed by the College guarantees occupancy for no more than one academic year. All students must apply for housing each academic year.

DAMAGE DEPOSIT POLICY

The $50. Damage Deposit will be considered as the resident's damage deposit. Any damages that are found during or upon termination of occupancy will be assessed against the damage deposit or billed directly to the resident. Residents who incur individual damages will be required to pay damages within thirty (30) days of receipt of the bill and may be denied future housing. The resident will be responsible for the condition of the room assigned. Each room will be inspected by the College Staff in the presence of the resident prior to occupancy and upon termination of occupancy. Any lack of cleanliness, damage, theft, vandalism or loss of College property, including loss of keys issued to the resident, will be charged against the resident's damage deposit or billed directly to the resident. Damages of common areas within the residence hall may be pro-rated among the residents of the hall or

a specified area of the hall. An assessment for loss, based upon an itemized estimate of loss from damage, theft or vandalism, will be given to the resident within thirty (30) days of the expiration of the term of the agreement. The damage deposit, minus any assessment for loss, will be refunded within thirty (30) days after the expiration of the term of the Occupancy Agreement.

TUITION

ADVANCE TUITION PAYMENT

Upon notification of acceptance for admission to the College, a deposit payment of $50. is required. This payment will be applied to the tuition for the first semester and is not refundable.

TUITION FOR MASSACHUSETTS RESIDENTS

As a State institution, the College offers the privilege of in-state tuition to all students entering from the Commonwealth. Eligibility for admission under the in-state residential rate is determined in accordance with the policy established by the Board of Regents. A Proof of Residency form will be mailed to you by the Admission Office in the process of your applying for entrance to the College and your acceptance into the College.

TUITION WAIVERS

Massachusetts Vietnam Veterans

A waiver of tuition may be possible, renewable annually prior to the start of each academic year, when proper certificates and credentials are submitted to the College Registrar's Office.

Senior Citizens

There will be no charge for tuition to any person 60 years of age or over attending a state college in the Commonwealth of Massachusetts provided that there is space available according to guidelines available from the Office of the College's Vice President for Academic Affairs.

Massachusetts National Guard

A tuition waiver is available to any member of the active Massachusetts Army or Air National Guard, renewable annually, when proper certificates and credentials are submitted to the Bursar's Office.

PAYMENT OF STUDENT TUITION AND FEE BILLS

Students are billed twice a year, prior to the start of each semester. Bills are sent to students at their home addresses. Payment must be made prior to the due date which is specified at the time of billing. Failure to comply will result in a late payment fee.

Full satisfaction of tuition and all fees is necessary before registration is considered complete.

All payment of bills to the College Business Office must be paid by certified check, bank money order, check or postal money order. Cash and personal checks will not be accepted.

Checks should be made payable to the order of Westfield State College and directed to the Bursar's Office.

POLICY REGARDING OUTSTANDING DEBTS

It is the policy of the Board of Trustees that students or former students who are listed by the financial office of Westfield State College as having unpaid debts for tuition, room, board, medical or other College related charges where said debts have not been discharged by operation of law or where deferred payment of said debts has not been agreed to by said College, the student will not (1) be issued a diploma to which said student might otherwise be entitled; (2) be permitted to register for any program at any State College for which said students might otherwise be eligible; and (3) be furnished a certified copy of any State College transcript (unless said transcript is needed to obtain benefits related to service in the United States Armed Forces) although said students will be entitled, upon written request, to inspect and review uncertified copies of the transcripts.

SCHEDULE OF ESTIMATES COSTS, 1986-1987 ACADEMIC YEAR

	Per Semester	Per Year
Tuition, Full-Time Students		
Residents of Massachusetts	$468.00	$936.00
Out-of-State Residents		
Room Rent on Campus		
Residence Halls (Scanlon, Davis, Dickinson, Lammers)	$600.00	$1200.00
Apartments	$725.00	$1450.00
Reserve for Residence Damage		$50.00
Board		
7-day plan, 19 meals		$993.00
Fees — General, Mandatory		
Student Activity	$26.00	$52.00
Campus Center	$25.00	$50.00
Library Development	$15.00	$30.00
Athletic	$44.25	$88.50
Educational Services	$25.00	$50.00
Health	$32.50	$65.00
Fees — Other, One Time Only		
Freshman Testing Fee		$7.50
Orientation		
Freshman		$40.00
Transfer		$9.50
Placement (Freshmen)		$15.00
Late Tuition and Fees Payment Charge		$25.00
Late Registration Charge		$25.00
Field Experience (Student Teaching)		$100.00
Student Health Insurance (Optional)		$110.00
Commencement		
Seniors (Classes 1985-1988)		$25.00
Freshmen (starting with class of 1989)		$25.00
Miscellaneous Expenses		
Books and Supplies (Approximate)		$300.00
Auto Parking Permit (original permit)		$5.00
.50 each replacement permit		
.50 for additional vehicles		
MASSPIRG (Optional)		$6.00
Transcript Fees		
First copy no charge		
Second and following copies $1.00 each		

MUSIC LESSON FEES

Music Majors are exempt from applied music instruction fees for those lessons required by the particular Program of the individual student. The instruction fee for all other MAJOR OR MINOR INSTRUMENT OR VOICE Lessons is: one hour at $225 per semester, or one-half hour at $112.50 per semester. Forms for this purpose may be obtained from the individual instructor, or from the department chairman. All fees must be paid prior to the first lesson, each semester. Refunds for withdrawal are the same as that given elsewhere for returning students.

REFUNDS

WITHDRAWAL REFUND POLICY

Commitments to faculty, staff and other costs of operation are made by the College in advance of the school year. They are based on anticipated student enrollment and residence hall occupancy and are not subject to change.

To be eligible for a refund, a student must formally withdraw from the College. The amount of refund will be determined on the basis of the official date of written withdrawal. Forms may be obtained in the Office of the Registrar.

Owing to the extremely heavy clerical demands during registration and the beginning of a semester, refunds should not be expected until at least four weeks after the start of a semester.

If a student withdraws from the College after paying his/her fee bills, refunds are allowed as follows:

Tuition Refund, New Students

Prior to the beginning of classes all tuition fees minus the $50. initial deposit.

Within the first week	66⅔%
Within the second week	50%
Within the third week	33⅓%
After the third week	NONE

Tuition Refund, Returning Students

Prior to the beginning of classes	100%
Within the first week	66⅔%
Within the second week	50%
Within the third week	33⅓%
After the third week	NONE

Board

Refunds for board are made on the same basis as tuition refunds for returning students. They will be made by the Food Service Concessionaire for commuters and

for College Apartment residents. Dormitory residents should see the College Bursar.

Room

All dormitory and College Apartment residents have occupancy agreements. See the Housing Office for information on withdrawal prior to occupancy, withdrawal during term of agreement, and individual exceptions. Refunds normally are tied to both written notification of intention to withdraw and to the College's ability to fill the vacancy created by the resident's withdrawal.

OTHER FEES

There will be no refunds on the following after classes begin: Student Activity Fee, Athletic Fee, Student Union Fee, Library Development Fee, Orientation Fee, Placement Service Fee, Educational Service Fee, Health Fee and Parking Permit Fee.

STUDENT SERVICES

ORIENTATION

FRESHMAN ORIENTATION

A three-day period of Orientation for Freshmen is held on campus prior to the opening of College in September. One half of the Freshmen attend each session. All students stay in the residence halls during this program.

The program is designed to help students become acquainted with the Westfield State College campus, campus leaders, fellow classmates, faculty, and administrative staff. Many topics are discussed, social activities are enjoyed, and all formal admission procedures are completed.

Group Leaders are selected from among interested students by an Executive Board of returning Group Leaders to assist with Orientation and to aid Freshmen during the school year.

TRANSFER AND RETURNING STUDENTS

A day of Orientation for transfer and returning students is held during the week preceding the official opening of College. The program consists of an assembly which serves as an introduction to the campus, meetings with major advisors, I.D. photos, the purchase of books and supplies, and a buffet luncheon.

OFFICE OF MINORITY AFFAIRS

The Office of Minority Affairs is the administrative base for two essential programs serving disadvantaged and ethnically minority students. The *Alternative for Individualized Development Program* (A.I.D.) recruits high school students from diverse ethnic and educational backgrounds, provides them with intensive support in computer skills, mathematics and language arts and other comprehensive academic and career counseling, while the *Special Services Program* offers counseling and tutorial help to over 300 students selected from an eligible pool of students who are either first-generation college students (i.e., neither parent holds a college degree), economically disadvantaged, or physically handicapped.

The Westfield State College A.I.D. Program is referred to as the URBAN EDUCATION PROGRAM. The project begins each summer with a 6-week "Bridge Session" which offers students developmental instruction in Mathematics and Language Arts as well as coursework from the College's academic "core", including General Psychology, Environmental Biology or Biology of Organisms, Ethics, or the Philosophy of Science. A bi-lingual component offers coursework and counseling for non-native English speaking students.

Additionally, The Office of Minority Affairs produces a variety of academic, social and cultural experiences that nurture a growing awareness of and respect for

cultural differences within the college community and, at the same time, enhance the self-esteem and confidence of program participants.

HOUSING

ON CAMPUS

Sixty percent of the student body resides in on-campus housing facilities. These include two female, one male and one coed residence hall and an apartment complex. A wide variety of life-styles is available in on-campus housing including typical double and sometimes tripled rooms, special interest sections and furnished apartments with full cooking facilities. Facilities for the handicapped are available in each style and price range.

Each Residence Hall is staffed with a full-time professional Director, student Resident Advisors, housekeeping and security personnel, and governed by an elected Dormitory Council. Residence life is designed to maximize the educational and personal growth of each student.

OFF CAMPUS

The College maintains a listing of available off-campus housing and assists students who wish to live off campus in finding roommates and accommodations. However, the College does not evaluate the off-campus housing available and is not party to any arrangements made between a student and a local landlord.

DINING FACILITIES

Westfield State College operates three food service facilities on campus.

Scanlon Dining Hall offers a seven-day 19 meal plan. All resident students with the exception of Apartment residents are required to participate in the plan. Commuting students as well as Apartment residents may purchase a meal plan.

Bates Cafeteria offers breakfast, lunch and dinner on an a-la-carte basis Monday through Friday.

The Campus Center Snack Bar is open seven days a week during academic semesters until nine o'clock in the evenings. It offers sandwiches and snacks on an a-la-carte basis.

HEALTH SERVICES

Health Services are available to all students enrolled at the College.

The infirmary is located in the East Wing of Scanlon Hall. Twenty-four hour coverage is provided during the school year with beds for nine students available for overnight treatment.

A College Physician is on duty when classes are in session from 9:00 A.M. to 11:00 A.M. He provides treatment for minor ailments and referrals on other problems.

Persons requiring emergency treatment, day or night, are transported to Noble Hospital by ambulance or by Campus Security Personnel.

ATHLETICS

Westfield State College has an extensive, quality program of intercollegiate athletics. Twenty-two athletic teams participate in intercollegiate varsity competition. The twelve men's teams and ten women's teams compete under the umbrella of the National Collegiate Athletic Association (NCAA). In addition to fielding teams in Division III of the NCAA, Westfield State College holds membership in the Eastern College Athletic Conference (ECAC), the Massachusetts State College Athletic Conference (MASCAC), and the New England Collegiate Athletic Conference (NECAC).

Teams from Westfield State participate in post-season tournament competition. Regular participation by Westfield State College teams in the NCAA Tournament is the rule rather than the exception.

INTERCOLLEGIATE TEAMS

	MEN'S	WOMEN'S
FALL	Cross Country	Cross Country
	Football	Field Hockey
	Golf	Soccer
	Soccer	Tennis
	Tennis	Volleyball
WINTER	Basketball	Basketball
	Hockey	Gymnastics
	Indoor Track	Swimming
	Volleyball	
SPRING	Baseball	Softball
	Lacrosse	Spring Track
	Spring Track	

FACILITIES

With the scheduled addition of new baseball and softball fields and a set of tennis courts, the Westfield State College outdoor facilities will rank with the finest in the region. The present astro-turf athletic facility provides seating for 4500 spectators. The all-weather composition track surrounding the field offers the men's and women's track teams superior running conditions.

Indoor facilities on campus include a swimming pool used for intercollegiate competition and a gymnasium which accomodates the basketball and volleyball teams. An auxiliary gymnasium houses the women's intercollegiate gymnastics team. The varsity ice hockey team practices and competes at the Fitzpatrick Rink.

INTRAMURAL AND RECREATIONAL SPORTS

Westfield State's intramural sports program welcomes students of every ability. Over 85% of the student population participates in a broad spectrum of activities, competitive and non-competitive, for both men and women. The program offers thirty activities per year. Trimnastics, basketball, softball, water polo, tennis, and running are perennially popular.

CO-CURRICULAR ELIGIBILITY

All students are entitled to eight semesters, summers excluded, of co-curricular eligibility. If a student requires more than four years (8 semesters) to be graduated from Westfield State College, he/she is no longer eligible for any semester of co-curricular activity in excess of eight.

Transfer students' co-curricular eligibility will be determined on the basis of their class status upon admission — Sophomores, six semesters; Juniors, four semesters; Seniors, two semesters. Athletic eligibility is determined by prevailing NCAA regulations.

CAREER COUNSELING CENTER

The Career Counseling Center provides career counseling services for Westfield State College undergraduate and graduate students and alumni. Services include individual and group career testing/assessment, career counseling, career planning, assistance with academic problems, skill development training workshops, and an extensive career resource library. Students are referred to the office as well as self-referred. Small groups as well as individual sessions are available. Students are encouraged to take advantage of these services early in their college career. The Career Counseling Center is located in the Career Planning and Placement Office.

PLACEMENT SERVICES

Advising and counseling are provided for both undergraduates and graduates in developing career goals through self-assessment. Advising and counseling are provided also to help graduates and undergraduates develop job search techniques such as networking, company research, creating effective resumes, and acquiring effective interviewing skills. A variety of additional services assist undergraduates and graduates in their quest for a fulfilling career; these services include computerized job matching, credential file maintenance and mailing, a weekly newsletter of job vacancies, alumni professionals resource file, on-campus recruiting, and an extensive career resource library. Seminars and workshops are regularly conducted to orient undergraduates and graduates in how to develop a credential file, acquire an effective reference, develop an effective resume and cover letter, and pursue a career and/or graduate work.

CENTER FOR PSYCHOLOGICAL SERVICES

The Westfield State College Center for Psychological Services (Counseling Service) is sponsored by the Psychology Department. Its major function is to meet the personal needs of students.

The major approaches used in working with students center around individual and group counseling. These sessions typically last an hour to an hour and a half per week. In addition, the counseling service recently established a limited family counseling program whereby students and their families may be seen together.

All information is strictly confidential. All staff members have doctorates in clinical or counseling psychology.

The Counseling Center is located in Wilson Hall, Room C-114. The Office of eh Director of the Center is also in Wilson Hall, W-134, Psychology Department Office. The phone extension is 376 or 378. Appointments are typically made through the Director. Students are usually seen between 8 A.M. and 5 P.M.

VETERANS SERVICES

The Veterans' Affairs Office at Westfield State College stresses an individual approach to the veteran's problems, concerns and needs. The relatively small size of the student body enables the office to provide answers and take action more quickly than on a large campus.

The Veterans' Affairs Office performs these services:

1. Explanation of all benefits to which you are entitled.
2. Follow-up on claims with the Veterans Administration.
3. Provides a counseling service for day and evening students.
4. Makes available several work-study grants in which a veteran may work from 100 to 250 hours per semester and receive between $250-625.

The veteran is entitled to:

1. Tuition-free education at any state college if a qualified Massachusetts veteran.
2. Financial aid in the form of scholarships, loans, federal funds, and work-study programs. In addition, direct loans from the Veterans Administration of up to $2,500 per academic year are available.
3. Tutorial assistance of a monthly rate of $60 to a total of $720.
4. College credit for service schools attended while on active duty.

PRIVACY AND CONFIDENTIALITY REGULATIONS

Privacy and Confidentiality regulations are promulgated pursuant to the provisions of General Laws Chapters 73 and 15, Section 20A, and the requirements of General Laws Chapters 66A, 30 (Section 63), and Chapter 214 (Section 3B), all as inserted by Chapter 776 of the Acts of 1975. The procedures set forth provide for the manner in which members of the College community and others shall have access to personal data in the possession of the State College.

For full details on the Privacy and Confidentiality Regulations please see the complete copy of the regulations posted at the college and/or contact the Office of the Vice President, Student Services.

THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act of 1974 which took effect on November 19, 1974, assures confidentiality of education records containing information directly related to a presently enrolled student, a former student or alumni.

The institution, according to the "Act," may make public "Directory Information" about a student e.g:, name, address, date and place of birth, telephone listings, schools attended, degrees and awards received, major field of study, participation

in officially recognized activities and sports, weight and height of members of athletic teams, and the most previous educational agency or institution, unless the student specifically requests in writing that his/her prior consent be obtained.

A request made by students to suppress from public distribution the above mentioned information is to be made in writing annually to the office of the Vice President, Student Services, no later than October 1 of the academic year for which the information is being made public.

Further information on the Family Education Rights and Privacy Act of 1974 may be obtained from the Office of the Vice President, Student Services, or the Registrar.

ACADEMIC LIFE: PROCEDURES AND POLICIES

ACADEMIC ADVISING

All students will be provided advising regarding their academic programs. This advising includes:

1. A suitable major program, minors and any changes in program of study.
2. Registration, semester by semester.
3. Assistance with individual courses.
4. Academic achievement, including honors programs.
5. Total number of graduation credits accrued.

To advise students, the College relies on:

1. The Department Chairs.
2. Individual instructors, course by course.
3. Selected members of the faculty and administration.
4. Members of the Student Services Staff.
5. The Coordinator of Academic Advisement.

The Chairs of major departments are responsible for the advising of students, for the selection of a suitable major, change of major, and registration. Designated members of the faculty assist the Chairs with this duty.

The Coordinator of Academic Advisement is responsible for coordinating the advisement of undeclared majors through a program of volunteer advisors from among faculty and administrators, and for general coordination of the academic advising program.

SPECIAL OPPORTUNITIES

FRESHMAN EXPLORATION I

Freshman Exploration (FE 101) is a one-credit course which may be elected by freshmen in their fall semester. It provides an orientation to the academic life of Wesfield State College under faculty direction. Freshmen explore a wide spectrum of topics important to students, including study skills, stress management, use of reference materials, and improving human relations. Students will also develop skills in analyzing, reasoning, oral and written communication, and problem solving. This course meets two hours per week and is offered only on a pass/no record basis.

NATIONAL EXCHANGE PROGRAM

The Exchange Program provides an opportunity for selected Sophomores and Juniors to take their Spring semester at another college. Occasionally, Seniors have

been included in a Fall exchange. The exchange is a direct one, in that our students pay all fees at Westfield State College just as though they were still here. Student Senate, through its Activity Fee, underwrites a portion of the transportation charges.

The exchange is now being carried out with the University of Alaska; Arkansas Tech University; Delta State University; East Central State University; Oklahoma; University of Wisconsin — Platteville; and the University of South Dakota.

Selections for the Program are made by a selection committee composed of students from the Sophomore, Junior and Senior classes and appointees of Student Senate. Students who apply must have a 2.5 cumulative average. Information about the program may be obtained from the Office of the Associate Dean of Students.

STUDY ABROAD

This is a program of study in the student's discipline in a recognized foreign university for an academic year. It is open to qualified Juniors and Seniors. A maximum of thirty credits can be obtained. Associate Professor of Art, Bernard G. McMahon, is the advisor for this program. Countries in Europe, Latin America and Africa are included.

In addition, a program of student teaching abroad offers qualified applicants the opportunity to student teach in American schools abroad during the Junior or Senior year. Locations include such countries as Brazil, England, Greece, Italy and Spain. The program applies to the second and fourth quarters only.

COOPERATING COLLEGES OF GREATER SPRINGFIELD (CCGS)

Westfield State belongs to a consortium of the area's public and private institutions which has been specifically designed to enhance the educational experience through the use of cooperative programs. Known as the Cooperating Colleges of Greater Springfield (CCGS), the other member colleges are American International College, Bay Path Junior College, College of Our Lady of the Elms, Holyoke Community College, Springfield College, Springfield Technical Community College and Western New England College.

An agreement concluded by the Presidents of the eight member institutions makes it possible for students interested in a course which is not offered at their own colleges to take it without an additional fee at any of the other seven colleges on a space available basis. Tuition fees at their own college will give free access to any course at the other seven institutions of the C.C.G.S.

COLLEGE ACADEMIC PROGRAM SHARING (CAPS)

CAPS is a program designed to provide State College students the opportunity to study at another State College in order to add a different or specialized dimension to their undergraduate studies. A semester or more on a State College campus other than the student's home college will afford the student who participates the chance

to broaden his or her educational experience with a wider range of faculty and courses. Through CAPS, a student may take from three to thirty semester hours of college credit at another State College without going through formal registration procedures and without a formal transfer credit approval process.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

A student enrolled in a Westfield State degree program may be awarded a maximum of 60 semester hours of credit on the basis of College Level Examination Program (CLEP) test scores. No credit may be gained for passing a CLEP examination in cases where the student has already earned credit or course completion for the same subject area as covered by the examination.

Credit based on the CLEP General Examination will generally be granted to individuals who meet the college standards for performance on the examination. The amount of credit is established by the academic departments. Students should consult the Office of Career Planning and Placement for specific information.

General Examination	*Westfield Common Core Requirement Satisfied*
English Composition	English Composition
Humanities	Literature, Art, or Music
Math/Natural Science	Math/Natural Science
Social Science	Social Science

Credits based on the CLEP Subject Examination will be granted to individuals who meet the college standards for performance on the examination.

Westfield State College reserves the right to grant credit for only one test if there is an overlap in a General and a Subject Examination.

The English Department may, at its discretion, require an acceptable writing sample before granting credit for English Composition.

Each individual department determines whether credit from a Subject Examination will be granted within the major or an elective area.

Students must take the CLEP General Examination prior to the completion of their first year at Westfield State College. Students must take the special examination prior to enrollment in the course which is equivalent to the special examination. In no case shall a student be granted CLEP credit if the student has completed, or is in the process of completing the course. (That is, CLEP cannot be substituted for completion of the course requirements.)

RESERVE OFFICERS TRAINING CORPS — R.O.T.C.

Westfield State College, in cooperation with Western New England College and The University of Massachusetts, offers an R.O.T.C. (Reserve Officers Training Corps) Program leading to the rank of Second Lieutenant in the active Army, Army Reserve or the Massachusetts National Guard. The program is directed by the United States Army and is available to all students. Actual courses are taken off-campus, primarily at Western New England College, through the Cooperating Colleges of Greater Springfield.

CORP — COLLEGE OFFICERS RECRUITMENT PROGRAM

The Massachusetts National Guard offers a training program for officers in which a student can receive free tuition and is commissioned after two years in the program.

SCHOLASTIC REQUIREMENTS

COURSE LOAD

Fifteen (15) credit hours is the normal academic course load of students at Westfield State College. Students may enroll for up to eighteen (18) credit hours without special permission; however, students wishing to enroll for more than eighteen credit hours must secure the permission of the Department Chair and the Undergraduate Dean. Course overload permission forms are available at the Registrar's Office.

Twelve (12) hours a semester is the minimum load for day students. Eighth semester Seniors are permitted exception to this rule.

Students carrying less than 12 hours lose their eligibility for residence hall space and cannot represent the College in co-curricular activities. Financial aid awards may also be affected.

GRADES AND CREDITS

Quality Point System

The cumulative quality point average is computed at the end of each semester. The determination of quality points is made at the end of each college year. The points scored in all courses are averaged. The number of quality points which a student receives in a course is determined by multiplying the total number of semester hours in the course by the corresponding number of quality points, e.g., a six-semester hour course with a rating of "4" has a value of 24 quality points. The average is computed by dividing the total number of quality points by the total number of semester hours.

Westfield State College uses a quality point system of:

A	—4.0	B+	—3.3	C+	—2.3	D+	—1.3	F	—0.0
A-	—3.7	B	—3.0	C	—2.0	D	—1.0		
		B-	—2.7	C-	—1.7				

Grades of "F" can never be removed, but the subjects in which they have been received may be repeated and passed, or, in the case of electives, other approved courses must be taken and passed either in approved Summer Sessions, or when possible during the regular college year.

Incomplete Grades

The grade of incomplete (I) is to be assigned only if 80% of the course work has been completed at the time of discontinuance. Further, the grade of I is to be assigned only to the relatively few students per term who have valid, approved reasons for their inability to complete the courses on time. I is not assigned to a potential FAILURE.

I (INCOMPLETE) BECOMES A FAILURE UNLESS SATISFACTORILY COMPLETED DURING THE FIRST FOUR WEEKS OF THE NEXT SEMESTER. It is the student's responsibility to see that the necessary work is made up.

Credits for Transfer Students

Transfer students are those who have attended a college other than Westfield State College and completed credits accepted toward a degree at Westfield State College. Transferees are assigned to a class based upon the number of credits that were accepted toward their degree requirements at Westfield State College.

Any and all cumulative point averages earned at other institutions prior to acceptance to Westfield State College do not reflect in a student's statistical average while at this institution.

The one exception to this rule applies in consideration of a student graduating with honors. In these cases, a student's four-year record will be judged and will include all institutions attended. A student must have attended Westfield State College for a minimum of two years in order to be eligible for graduation honors.

Academic Probation

Academic probation is assigned following the first semester's completion of courses in a given academic year to students at Westfield State College who fall short of the required cumulative quality point average for their class standing (see below). Such students are placed on academic probation for one semester. A student is removed from academic probation in the following fall semester if in good academic standing.

Any exceptions to the foregoing policy based upon extenuating circumstances may be appealed to the Probation and Academic Retention Committee.

Students who have been placed on academic probation must have their academic workload reduced for the following semester to 12 credits. Further, participation in any co-curricular activities is prohibited.

Students may be placed on no more than two semesters of academic probation, and these cannot be consecutive.

This policy is administered by the Probation and Academic Retention Committee, which consists of the following (or their respective designees):

Registrar (Chairperson)
Vice President for Academic Affairs
Vice President for Student Services
Dean of Undergraduate Studies
Director of Minority Affairs
Coordinator of Academic Advisement

Written appeals should be filed with the Registrar.

Academic Retention and Dismissal

At the close of each academic year, each student whose cumulative quality point average falls below that required for his or her class standing is subject to academic dismissal. In the case of any student who has, for any reason, not completed at least two semesters of study at the College at the close of a given academic year, this procedure shall first apply at the close of his or her second semester of study (but, thereafter, it shall apply at the close of each academic year). Freshmen shall not be retained by the College if they have achieved less than a 1.0 cumulative average after their first semester. Transfer students shall not be retained by the College if they have achieved less than a 1.0 cumulative average after their first semester.

A student's academic performance is **unsatisfactory** if his or her cumulative quality point average fails to meet the applicable standard:

For students who have attempted from one to thirty-six hours of credit: 1.50 points.

For students who have attempted from thirty-seven to sixty-six hours of credit: 1.75 points.

For students who have attempted sixty-seven or more hours of credit: 2.00 points.

A student's academic performance also is **unsatisfactory** if he or she has received the grade of "F" in three or more courses during a given semester.

REQUIREMENTS FOR GRADUATION

Only students who have met the following requirements will graduate:

1. A cumulative quality point average of 2.00 or better.
2. 120 *successful* credits. Successful credits require a grade of "D" or better.
3. CORE requirements must be completed successfully.
4. Requirements of a major must be completed successfully.
5. Where a student has received an "F" in a required course, that course must be retaken; another course may be substituted if it would meet the same requirement.

Students should check with their advisors *before* the senior year to insure that all of these requirements for graduation are met.

EXAMINATIONS AND FINALS

All students are required to take examinations at the time and place designated by the instructor. A final examination schedule is posted each semester.

When a student misses a final examination, but has met all the other requirements of the course, the Incomplete grade is assigned.

All students are to take each and every examination at the time and place assigned. If a student does not meet the requirements, the instructor **may** offer a "make-up" examination.

ACADEMIC HONORS

THE HONORS PROGRAM

The Westfield State College Honors Program aims to provide interested and qualified students an avenue of advancing in the major field as far as their ability and enthusiasm will allow. A detailed brochure is available upon request.

DEAN'S LIST

In order to be cited by the Registrar for academic honors known as the Dean's List, a student must have:

1. An average of "B" (3.3) or above during the semester.
2. No grade below "C" (2.0).
3. A program of at least 12 semester hours.
4. No grade of Incomplete.

WISDOM AND MERIT AWARD

Each year the Executive Committee of the Senior Class and the staff of the Student and Campus Affairs Office select outstanding members of the Senior Class to receive the Westfield State College Wisdom and Merit Award. To be eligible, Seniors not only must achieve academically, but also must assist their class and the College in significant ways. The award carries the distinction of permanent record on the official College transcript.

GRADUATION HONORS

Cum Laude	3.30 to 3.59
Magna Cum Laude	3.60 to 3.79
Summa Cum Laude	3.80 or better

Students eligible for graduation honors must have attended Westfield State College for a minimum of two (2) years (60 credit hours).

All transfer students in order to qualify for graduation honors must have all their collegiate academic credits computed to determine their cumulative quality point average.

PROCEDURES FOR PROGRAM CHANGES

WITHDRAWING FROM COURSES

Students who enroll in a course have two weeks to decide to withdraw without academic penalty or notation on their records. Students who withdraw between the third week and the eighth week of a regular semester will have no penalty as far as the cumulative average is concerned but will have a notation of "W" on their permanent records. No student may withdraw from any course during a regular semester after the eighth week, unless there are extenuating circumstances, such as hospitalization. Courses that are scheduled for eight weeks may be dropped only during the first four weeks. Section changes and course additions for these condensed courses may be made only during the first week. Any student not attending a course officially withdrawing will be considered as withdrawing "unofficially" and will be issued an "F" grade on his/her record. This "F" grade will be used in computing the student's semester and cumulative average. STUDENTS MAY SECURE COURSE WITHDRAWAL FORMS AT THE REGISTRAR'S OFFICE.

ADDING COURSES

Students may add courses to their schedules during the first two weeks of each semester. ADD FORMS MAY BE SECURED AT THE REGISTRAR'S OFFICE.

DECLARATION OF MAJOR

All students should be accepted into a major by the beginning of their junior year, or they may be subject to dismissal. In accepting students the college has an obligation to provide a complete program of study, including a major. However, the college may not be able to guarantee that there will be space available in all majors. Departments may establish specific requirements for entrance and retention in a major. Students should consult the intended department, the Office of Academic Affairs, or the Advising Center.

CHANGING A MAJOR

Students wishing to change their majors must secure a "Change of Major Form" from the Registrar's Office. This form requires the approval of the Chair of the new department and release from the Chair of the original department.

ACADEMIC HONESTY POLICY

Academic honesty is expected of all students. Plagiarism and cheating are not condoned and are subject to an academic penalty, which may be failure for the course in which the violation took place. A record of the violation is submitted to the Office of Academic Affairs and repeated offenses may result in suspension or dismissal from the College.

Violations of academic honesty include cheating on examinations, plagiarism, and submission of papers for credit in two or more classes. This listing is illustrative.

EXAMINATIONS

Violations of academic honesty with regard to examinations consist of the following:

1. Receiving assistance or assisting others while the examination is in progress.
2. Obtaining or attempting to obtain previous to an examination, copies of the examination or the questions to appear on the examination.
3. Obtaining or attempting to obtain any unauthorized knowledge regarding the exam or the questions to appear on the examination from another student who possesses information regarding the contents of the exam.
4. Disseminating any written or verbal information regarding the contents of an examination to students who have not yet completed or taken said examination.
5. Utilizing or consulting any unauthorized information, such as notes, or books, during an examination.

PLAGIARISM

Plagiarism will not be tolerated. Plagiarism consists of utilizing the work, words, or ideas of another person as if they were your own. All papers must have proper footnotes and references.

MULTIPLE SUBMISSIONS OF A SINGLE PAPER

Instructors are not required to accept a term paper submitted in other courses, i.e., a student may not submit the same research paper for credit in two classes within the college without prior written consent from both instructors.

ASSISTANCE PROGRAMS

TUTORING

Tutoring assistance is available. Students should contact their advisors.

SPECIAL SERVICES LEARNING CENTER

Staffed by eight professionals and approximately 70 peer tutors, the Learning Center offers the following supportive services:

Course instruction in Writing Skills, Study Skills, Academic Strategies, Mathematics, and English as a Second Language.

Tutoring in literally all areas of the college curriculum.

Individual academic and personal counseling.

Computer assisted instruction in specific content areas as well as instruction in Word Processing for paper writing.

Advocacy for students with Learning Disabilities.

Arrangement for notetakers, recorded books, interpreters, scribes, etc., for handicapped students.

CLASS ATTENDANCE

The student classroom attendance regulations shall be determined individually by each member of the faculty who is responsible and accountable for stating these regulations clearly in writing at the beginning of each course of instruction.

PROCEDURES FOR GRADUATION

All students wishing to graduate at the end of the Spring semester must make **formal application** for graduation at the Registrar's Office by March 1. Students wishing to graduate in August must make **formal application** by July 1, and those wishing to graduate in January must make **formal application** by November 1.

This application is in addition to the filing of a diploma name card during earlier registrations.

If such formal application is not completed by the deadline, students will neither participate in graduation ceremonies nor receive their degree until the following graduation.

It is the responsibility of each senior student to provide the Registrar with information and transcripts concerning all course work completed outside the Westfield State College day division.

PROCEDURE FOR WITHDRAWING FROM COLLEGE

When a student withdraws from college, the following procedure should be followed:

1. Obtain a Clearance Form from the Office of the Registrar and follow procedures listed thereon.
2. Return completed Clearance Form to the Registrar's Office.
3. Complete a Withdrawal Form in the Registrar's Office.

A withdrawal grade of WP (Withdraw Passing) or WF (Withdraw Failing) will be obtained for each course in which the student was enrolled. These grades will be posted on the student's transcript card but not computed in his/her cumulative average. Any student receiving three (3) or more WF's is ineligible to return the following semester.

CERTIFICATION FOR TEACHING

All graduates who satisfactorily complete a college-approved program for teaching and apply are recommended by the Vice President, Academic Affairs, for certification by Commonwealth of Massachusetts, Department of Education.

REQUESTING TRANSCRIPTS

Transcripts are issued by the Registrar when the student completes the written request form and pays the one dolar ($1.00) fee. The first copy of the transcript is supplied at no cost. Telephone requests are *not* accepted. Official copies are not issued to students or graduates.

ACADEMIC FREEDOM AND RESPONSIBILITY

The Board of Trustees and the Massachusetts Teachers Association/NEA endorse the principles and standards of academic freedom and academic responsibility as generally and traditionally accepted in institutions of higher education. They agree to promote public understanding and support of academic freedom and agreement upon procedures to assure academic freedom in colleges and universities. Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition. Academic freedom is essential to these purposes and applies to both teaching and research.

Academic freedom is the right of scholars in institutions of higher education to study, discuss, investigate, teach, exhibit, perform, and publish. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and of the student in learning.

The teacher is entitled to full freedom in research and in the exhibition, performance, and publication of the results of his/her research, to full freedom in the

classroom in discussing his/her subject, and most specifically in the selection of classroom materials including selection of texts. The teacher is entitled to discuss controversial issues. As both a teacher and scholar he/she recognizes a professional obligation to present various scholarly opinions and to avoid presenting totally unrelated materials.

Faculty members have the right to determine the amount and character of the work and other activities they pursue outside the College provided such work and other activities do not interfere with the discharge of their responsiblities.

EARNING A DEGREE

COURSES OF STUDY

Westfield State College students may major in one of the following areas (see department course listing for specific major requirements):

Applied Chemistry
Art
Biology
Business Management
Computer Science
Criminal Justice
Economics
Elementary Education
English
French
General Science
Geography and Regional Planning
History
Liberal Studies
Mathematics
Media Systems and Management
Music
Physical Education
Political Science
Psychology
Social Science
Spanish
Special Education

Westfield State College students may also minor in any of the areas listed above and also in the following:

Chemistry
General Science
Geography
Journalism
Latin American Studies
Philosophy
Secondary Education
Sociology
Speech and Theatre Arts
Women's Studies

(A complete listing is available in the college application.)

COURSE PATTERN FOR A DEGREE

One hundred and twenty credits are required for graduation. They are obtained through the following pattern which is used as a guide for every student's course of study. The pattern consists of three segments:

1. *The General Core:* This segment is required of all students and includes the following:

	Credits
English Composition	6
Math and Science	9
State and Local History	3
Social Sciences	9
Fine Arts	6
Intellectual and Moral Criticism	6
Total	39

2. *Major Core:* Courses in this segment are prescribed by the department wherein the major is housed and may total forty hours of credit. For specific major program requirements, see the departmental section in this catalog.
3. *Elective Core:* Courses are selected by students depending on their own interests except for the major in elementary education/special education. A total of forty hours or more may be acquired in this segment.

The foundations of the General Core are disciplinary forms within which students select specific courses. The goals of the General Core are to introduce students to areas of study which are seen as necessary ingredients for a cultivated, humane life.

In meeting the requirements of the General Core, Westfield students acquire:

1. The capacity to communicate clearly in one or more natural languages
2. The capacity for intellectual and moral criticism
3. An appreciation of the fine arts
4. An understanding of the machinery of state and its history
5. The capacity for social understanding
6. An understanding of natural science
7. An understanding of mathematical reasoning.

GENERAL CORE OF STUDIES

HUMANITIES

1.	**Communication** (6 hours)			
	English	EN	101-102	English Composition I & II
2.	**Intellectual & Moral Criticism** (6 hours — any distribution)			
	Philosophy	PH	101	Introduction to Social & Political Philosophy
		PH	102	Introduction to Ethics
		PH	104	Great Philosophical Issues
		PH	107	Major Religions of the West
		PH	108	Major Religions of the East
		PH	110	Introduction to Philosophy of Science
	Literature	EN	213	Major British Writers
		EN	215	Major American Writers
		EN	221-222	World Literature I & II
		EN	228	Introduction to Shakespeare
	Language	LF	101-102	French I & II
		LF	103-104	French III & IV
		LG	101-102	German I & II
		LG	103-104	German III & IV
		LI	101-102	Italian I & II
		LL	101	Introduction to Study of Language
		LS	101-104	Spanish I & II, III, IV
		LE	101	French Culture
		LE	102	German Culture
		LE	103	Italian Culture
		LE	104	Hispanic Culture
3.	**Appreciation of the Fine Arts** (6 hours — any distribution)			
	Art	FA	104	Design Fundamentals
		FA	106-107	Art Survey I & II
	Music	MU	101	Music Appreciation
		MU	110	Basic Music Theory
		MU	160	History of Jazz
		MU	102	Music in America
	Drama	EN	104	Introduction to the Theatre

SOCIAL SCIENCE

1.	**State and Local History** (3 hours — required by State Law)			
		HI	130	U.S. History and Government
		PL	101	American National Government
2.	**Social Understanding** (9 hours — not more than 6 in one area)			
	Economics	EC	101	Principles of Macroeconomics
		EC	102	Principles of Microeconomics
	Geography	GP	101	Principles of Geography
	History	HI	101	Western Experience I
		HI	102	Western Experience II
		HI	150	Introduction to the Non-Western World
	Political Science	PL	101	American National Government
		PL	103	State & Local Government
	Psychology	PY	101	General Psychology
	Sociology	SO	101	Principles of Sociology

ANALYTICAL SCIENCE (9 hours — with at least one Natural Science and one in Mathematical Reasoning. In addition, one lab science required for graduation.

1.	**Natural Science**			
	Physical Science	PS	101	Physical Science
		PS	104	Geology
		PS	105	Geology Lab
		PS	107	Introduction to Chemistry
		PS	109-111	General Chemistry I & II
		PS	113	Introduction to Physics
		PS	115-117	General Physics I & II

		PS	119-121	Physics I & II
		PS	133	Astronomy
	Geography	GP	102	Physical Geography
	Biology	BI	102	Environmental Biology
		BI	104	Biology of Organisms
		BI	106	Inheritance & Development
2.	**Mathematical Reasoning**			
	Mathematics	MA	103-104	Pre-Calculus Mathematics I & II
		MA	105-106	Calculus I & II
		MA	108	Elementary Statistics
		MA	109	Finite Mathematics
		MA	110	Mathematical Explorations
		MA	111	Mathematical Applications
		MA	113-114	Mathematics for Science I & II
		MA	115	Mathematics for Business and Social Sciences
		MA	131-132	Mathematics for Teacher Preparation I & II
	Logic	PH	103-206	Symbolic Logic I & II

DEPARTMENTAL PROGRAMS

In this catalog, there are separate sections for each department and interdisciplinary major within the College. Departments are listed alphabetically; the interdisciplinary majors, that is, majors without departmental status or departmental staff, follow.

Not every course in the following listing is offered annually. Definite information about course offerings and class hours is available at the time of registration through the Office of the Registrar. Insufficient enrollment or changing conditions may occasionally necessitate the withdrawal of scheduled courses.

Please check with appropriate departments to determine if the courses sought are being offered and when they are scheduled. This will be important in planning a program of classes for the year, and for designing a four-year program in order to meet degree requirements.

The course numbering system is as follows:
100 — Lower Level Courses
200 — Upper Level Courses (Undergraduate credit only)
300 — Upper Level Courses
400 — Graduate Credit courses only

ART

Chair, Ronald Michaud

Vladimir Brodsky, Patricia Conant, Justin Curry, Marci Gintis, Barbara Keim, Walter Korzec, Bernard G. McMahon

The emphasis within the visual arts program is development of a strong two-dimensional capability in the student through drawing and painting, as an avenue toward achieving the different goals of individual artists.

In addition to the major program, the Art Department offers suggested minors in pottery, sculpture, printmaking, or art history. Should a student wish to minor in commercial art or art education, provisions are made for a one-semester internship (practicum). All art courses are open to all students who meet the proper prerequisites and complement in particular such disciplines as History, English, and Computer Science.

The Arno Maris Art Gallery on campus, staffed by the Art Department, presents national and international exhibitions, including the annual student exhibition. The department is also responsible for the College Collection containing many fine works of art purchased and donated over the years and exhibited periodically.

The art studios are open to all art majors for any or all of their studio-related projects. Students may participate in various fine arts clubs which, along with the Department, sponsor field trips to area museums and galleries throughout the year.

REQUIREMENTS FOR ART MAJORS

Required art courses include:

DESIGN FUNDAMENTALS (3)
COLOR (3)
ART HISTORY (6)
ANATOMY-DRAWING (3)
DRAWING (6)
PAINTING (12)
POTTERY, SCULPTURE AND PRINTMAKING (12)
(at least three credits in each and six credits in one.)
ART MATERIALS AND
SAFEGUARDS IN ART (1)

Art majors must take 45 credits within the Department. They are advised to follow the suggested art program sequence and to finish the general core courses (required of undergraduate students in all majors) before taking electives.

Art majors intending to pursue graduate work are advised to take additional painting and art history courses.

Suggested art program sequence:

First Year
ART SURVEY (3)
DRAWING I (3)
DESIGN FUMDAMENTALS (3)
COLOR (3)
DRAWING II (3)

Second Year
PAINTING I (3)
POTTERY I (3)
ANATOMY (3)
PAINTING II (3)
SCULPTURE (3)

Third Year
PAINTING III (3)
PRINTING I (3)
ART HISTORY (3)
PAINTING IV (3)
ART ELECTIVE (3)

Fourth Year
ELECTIVES IN ART AND/OR CONCENTRATIONS

ART MAJOR — COMMERCIAL ART CONCENTRATION

For the Art Major student who is interested in a career in commercial art or advertising, the following program concentration is recommended.

Commercial Art Courses — 15 credit hours (from the following courses)
Lettering and Layout
Illustration I
Graphic Design I
Illustration II
Graphic Design II
Typography

Commercial Art Practicum — 6 credit hours (the above 15 credit hours prior to placement)

An eight week on-the-job work experience placement in a commercial art advertising agency.

Other elective courses can be taken in the technical graphic arts area at a local community college.

CERTIFICATION REQUIREMENTS FOR TEACHER OF ART (K-9, 5-12)

FA 106	Art Survey I	3 s.h.
FA 107	Art Survey II	3 s.h.
FA 104	Design Fundamentals	3 s.h.
FA 209	Color Theory	3 s.h.

Two (2) from the following Art History offerings:

FA 316	History of American Art	]
FA 317	Classical Art	]
FA 318	Flemish Art	]
FA 319	Renaissance Art	]
FA 321	Contemporary Artists and Contemporary Art	]
FA 333	Early Twentieth Century Art	]
FA 334	Nineteenth Century Art in Europe	] 6 s.h.
FA 345	Criticism	]
FA 346	Japanese Art and Architecture	]

FA 330	Anatomy for the Artist	3 s.h.
FA 103	Drawing I	3 s.h.
FA 301	Drawing II	3 s.h.
FA 102	Painting I	3 s.h.
FA 202	Painting II	3 s.h.
FA 203	Painting III	3 s.h.
FA 306	Painting IV	3 s.h.
FA 204	Pottery I	3 s.h.

FA 205	Sculpture I	3 s.h.
FA 201	Printmaking I	3 s.h.

One from the following selection:

FA 304	Pottery II	
FA 305	Sculpture II	
FA 303	Printmaking II	3 s.h.
	TOTAL	51 s.h.
PY 301 or 302	Child Psychology or Adolescent Psychology	3 s.h.
ED 170	Education of Exceptional Children	3 s.h.
FA 322	Art Education Curriculum	3 s.h.
FA 324	Art Methods and Materials	3 s.h.
FA 345	Criticism	3 s.h.
FA 310	Workshop in Crafts	3 s.h.
FA 323	Introduction to Art Education	1 s.h.
FA 331	Practicum (Art)	12 s.h.
FA 326	Practicum: Seminar	3 s.h.
		34 s.h.

ART HISTORY COURSES

FA 106 ART SURVEY I (3) Major representative works of western art and architecture from prehistoric times through the middle ages will be presented from a critical and historical viewpoint. The student will be introduced to the aesthetic and philosophical principles that underlie all art as to the real relationship between the visual arts and the culture and society which produced them.

FA 107 ART SURVEY II (3) The study of western art and architecture from the Renaissance to the present will be presented under the same format as ART SURVEY I.

FA 316 HISTORY OF AMERICAN ART (3) A study of the painting, architecture and practical arts in the United States from the period after colonial times to the present.

FA 317 CLASSICAL ART (3) The chief artistic accomplishments of ancient Greece and Rome. Extensive study into the realm of Greek and Roman architecture, classical sculpture, building and portraiture, as well as the minor arts.

FA 318 FLEMISH ART (3) Study of Netherlandish painting of the 14th through 16th century works of art, from Jean Pucelle to Brueghel.

FA 319 RENAISSANCE ART (3) A study of the major artistic achievements of the Italian Renaissance from Giotto to Michaelangelo with special emphasis on painting and sculpture.

FA 321 CONTEMPORARY ARTISTS AND CONTEMPORARY ART (3) Students will be introduced to the works and ideas of modern contemporary American artists since 1950 with reference to the influence of selected European modern artists. Museum trips are included.

FA 333 EARLY TWENTIETH CENTURY ART (3) A study of modern movements in painting and sculpture from 1900 to 1940 including Fauvism, Cubism, Futurism, and Surrealism.

FA 334 NINETEENTH CENTURY ART IN EUROPE (3) A study of European painting and sculpture from the Romantic-Classical styles of David and Delacroix through the Post-Impressionism of Paul Gauguin.

FA 338 EARLY CHRISTIAN AND BYZANTINE ART (3) A study of the sources and development of art of Christian West to 600 A.D. and of Byzantium to 1435. Attention will be given to the emergence of a Christian form of artistic expression and its connection with the heritage of late antique art, Byzantine architecture, its monumental mosaic and fresco decoration, manuscript illumination and icon painting.

FA 341 17th CENTURY ART (3) A study of formation and evolution of the Baroque movement in European architecture, sculpture and painting. Emphasis will be given to the individual styles and artistic ideas, as shown in works and writings of selected major artists of the 17th century.

FA 345 CRITICISM (3) Classical and contemporary theories of art with emphasis on concepts involved in the interpretation, evaluation and criticism of works of art. *Prerequisite: FA 106 and 107 or equivalent.*

FA 346 JAPANESE ART AND ARCHITECTURE (3) Japanese Art and Architecture, their Chinese sources and problems of evolution. Also, the social and cultural changes with the aesthetic output.

FA 347 NON-WESTERN TRADITIONS IN MODERN EUROPEAN AND AMERICAN ART (3) A study of selected problems including:

1) The meaning of Japanese colour prints in the development of Impressionism and Post-impressionism;

2) Modern Primitivism and its relation to the African sculpture and the art of primitive peoples; and

3) The significance of Japanese traditional architectural concept for Modern Japanese, European and American architecture.

The emphasis will be placed on the new relation between form and space developed under the condition of the crisis of the traditional western three-dimensional system of representation.

STUDIO COURSES

FA 102 PAINTING I (3) Introduction to oil painting with particular emphasis on gaining information about the material itself (color mixing, canvas preparation, preliminary drawing and general expressive potential of oil as a medium). Considerable study in picture organization, still life and figure composition.

FA 103 DRAWING I (3) Study of form and space with special attention to spatial proportional relationships.

FA 104 DESIGN FUNDAMENTALS (3) An investigation of the basic elements of art line, shape, color, texture, form, and space. These will be explained in theory as well as practice. The expressive possibilities of a variety of materials will be explored.

FA 105 THREE DIMENSIONAL DESIGN (3) The organization of three dimensional forms in a variety of media. Problems will include designing packages, toys, games, furniture, and a variety of other three-dimensional forms.

FA 201 PRINTMAKING I (3) The basic techniques in intaglio and relief printmaking will be explored. The intaglio procedures of line etching, aquatint, sugarlift and soft ground will be introduced. Collographs (a multimedia technique) and woodcuts (a relief printing process) will also be utilized. Students will create a series of prints in the various techniques and will develop an awareness of the visual and technical aspects of an original print.

FA 202 PAINTING II (3) Painting in oil and related media with concentration on furthering individual expression through interpretation of still life, figure and landscape. Problems in space, form and light are also studied. *Prerequisite: Painting I.*

FA 203 PAINTING III (3) Introduction to varied techniques such as paper, collage, assemblage and watercolor with individual subject matter selection appropriate to each student. *Prerequisite: Painting II.*

FA 204 POTTERY I (3) An introduction to all phases of creative ceramics, ranging from handbuilt pottery to slab sculpture and mosaics. Emphasis will be on exploration of the many decorative, functional and aesthetic aspects of ceramics.

FA 205 SCULPTURE I (3) Provides an elementary consideration of sculpture through form and composition and includes studies in clay and plaster. There is some work from the human figure. Techniques include armature constructions, direct building in plaster, and casting into plaster and other materials.

FA 207 WATERCOLOR PAINTING I (3) The various techniques of watercolor painting will be demonstrated. Studio work will consist of painting with a variety of methods.

FA 209 COLOR THEORY AND PRACTICE (3) The study of interaction of color in theory and practice through experimentation with various color media.

FA 301 DRAWING II (3) Drawing with concern for skeletal and muscular structure, the play of light and shade on human form and stylistic techniques. *Prerequisite: Drawing I.*

FA 302 WATERCOLOR PAINTING II (3) A continuance of Watercolor Painting I, with mixed media, including gouache. *Prerequisite: Watercolor Painting I.*

FA 303 PRINTMAKING II (3) A studio course which will further explore and develop the techniques of intaglio, relief, stencil and/or planographic printmaking. The emphasis will be on utilizing the various techniques introduced in Printmaking I and developing a deeper understanding of the visual and technical aspects of an original print. The use of color in the media of concentration will be explored. *Prerequisite: Printmaking I.*

FA 304 POTTERY II (3) A continuation of Ceramics I with emphasis on wheel thrown pottery and individual investigation and experimentation with glazes. *Prerequisite: Pottery I.*

FA 305 SCULPTURE II (3) Continuance of Sculpture I. *Prerequisite: Sculpture I.*

FA 306 PAINTING IV (3) Individual projects will be carried out under supervision and will result in an exhibit of selected works. *Prerequisite: Painting III.*

FA 307 ADVANCED PAINTING I (3) The student is assigned a particular studio area where he/she will be encouraged to develop, through paintings, his/her own interests and individuality. Discontinuance of regular classroom instruction, replaced by periodic consultation and discussion. *Prerequisite: Painting IV.*

FA 308 ADVANCED PAINTING II (3) The same individualization found in Advanced Painting I, with the important addition of a required thesis, in which the student should fully define and elucidate his intentions and directions in the light of his painting. *Prerequisite: Advanced Painting I.*

FA 309 ADVANCED DRAWING (3) A course in Advanced Drawing will develop the student's own direction and personal expression. *Prerequisite: Drawing II.*

FA 310 WORKSHOP IN CRAFTS (3) An introduction to a number of crafts and an opportunity to pursue several crafts as chosen. Woodwork, weaving, ceramics, enameling, puppetry, casting, rug designing, fibers and fabrics, basic printing techniques and leatherwork are offered.

FA 311 EXPERIMENTAL IN MEDIA (3) A studio course which will explore media and techniques relating to the visual arts. The visual experience will deal with traditional media such as oils, acrylics, and collage as well as conceptual and experimental modes of expression such as lights, sound, film, video tapes and other contemporary art sources. *Prerequisite: Design Fundamentals.*

FA 312 INTAGLIO PRINTING (3) This course will explore intaglio techniques not employed in Printmaking I. Engraving, mezzotint, drypoint, photo-intaglio and ink viscosity printing will be some of the areas introduced. Involvement with the intaglio media as a mode of expression will be emphasized. *Prerequisite: Printmaking I.*

FA 313 LITHOGRAPHY (3) A studio course dealing with the planographic techniques of lithography. The various drawing materials used in this medium will include crayon, tusche, asphaltum, and the transfer method. The technical aspects of preparing, etching and printing the stone will be stressed. The visual and artistic understanding of an original print will also be emphasized. Color lithography will be introduced with various methods of registration. *Prerequisite: Printmaking I.*

FA 314 RELIEF PRINTING (3) A studio course offering various methods of relief printing. The techniques covered in this area will be line-cuts, woodcuts, cardboardcuts, wood engravings and gessocuts. The use of more than one color in a relief print will also be explored. The visual and artistic understanding of the above techniques will be emphasized. *Prerequisite: Printmaking I.*

FA 315 SERIGRAPHY (3) A studio course dealing with the stencil printing process of serigraphy (silk-screen). This course will cover the basic processes in serigraphy which are paper, tusche, glue, cut or profilm, and the photographic techniques. The visual and artistic understanding of a serigraph print will also be emphasized. *Prerequisite: Printing I.*

FA 330 ANATOMY FOR THE ARTIST (3) A study of human anatomy including the bone structure, muscles, and proportions. The course will utilize anatomy charts, the skeleton, and live models. Students of dance and drama, as well as students of the visual arts, will benefit from an in-depth study of human anatomy and from an understanding of the human body in movement.

FA 332 PHOTOGRAPHY FILM-MAKING WORKSHOP (3) A studio course exploring the visual experience of still and motion picture photography through a study of its basic aesthetic elements in composition, design and technique.

FA 348 PORTFOLIO PREPARATION (3) A culmination of the Graphic Design Concentration or the Fine Art Studio sequence. Emphasis on portfolio content and arrangement for job placement interviews or graduate school application. Assignment of supplementary art projects to augment portfolio presentation and/or slide reproduction of work. Resume design, preparation, and content also included. *Prerequisites: permission of instructor; for senior art majors only.*

GRAPHIC DESIGN COURSES

FA 206 LETTERING AND LAYOUT (3) Basic type and letter forms will be studied with an emphasis on mechanical lettering. Calligraphy as an expressive use of lettering will also be utilized. Basic layout techniques will be discussed and explored in conjunction with commercial advertising, posters, product labels, and brochures.

FA 210 TYPOGRAPHY (3) The communicative and aesthetic aspects of type faces will be explored. Procedures in type specifications for catalogues, books and commercial advertisements will be introduced. Assignments will involve using type as the primary element in design. *Prerequisite: Lettering And Layout.*

FA 211 VISUAL COMMUNICATION AND DESIGN (3) A survey of media used in visual communication and commercial advertising. Technical procedures of printing and/or production will be outlined and basic design fundamentals, typography and graphic production procedures will be introduced. *Prerequisites: sophomore standing.*

FA 328 GRAPHIC DESIGN I (3) A studio course with emphasis on the integration of design fundamentals into graphic communicative forms. Students will be involved in problem-solving experiences in various advertising media. Specific concentration will be on newspaper and magazine advertisements, brochures, television art forms and package designs. *Prerequisite: Design Fundamentals, Lettering and Layout.*

FA 329 ILLUSTRATION I (3) A studio course to introduce the many facets in the illustration field. Students will be involved in various problem solving experiences with concentration on the materials, techniques, and reproduction processes used in magazine, book, technical, and film illustration. The techniques of air brush and photography as illustrative media may also be explored. *Prerequisite: Design Fundamentals.*

FA 340 COMMERCIAL ART PRACTICUM (6) An eight week, full time, on-the-job work experience program in which the student is placed in an advertising agency or commercial art work setting. The student will be supervised by the agency director and the art practicum advisor. This practicum experience sequence will prepare the student for work procedures in the commercial art field and assist in later job placement.

FA 343 ILLUSTRATION II (3) A continuation of the study of techniques and application of illustration in the fields of advertising, book publication and technical journals. Portfolio quality work will be stressed. *Prerequisite: Illustration I.*

FA 344 GRAPHIC DESIGN II (3) A continuation of the study of graphic communicative forms used in the advertising media. Emphasis will be on analyzing assigned problems and choosing appropriate media for final visual presentation. *Prerequisite: Graphic Design I.*

ART EDUCATION COURSES

FA 322 ART EDUCATION CURRICULUM (3) Curriculum development at either the elementary or secondary level. It includes visits to area schools for the purpose of observations and art curriculum study.

FA 323 INTRODUCTION TO ART EDUCATION (1) A pre-practicum experience providing students with a working knowledge of the various levels within the public school structure. This experience will be translated into a choice of certification level.

FA 324 ART METHODS AND MATERIALS (3) The methods, principles and materials for Art Education. Areas included are stages of development, goals of Art Education, personal goals for teaching art, lesson planning and organization and newer media in Art Education. It includes a related pre-practicum experience.

FA 325 ART IN THE ELEMENTARY SCHOOL K-6 (3) Studio experience with materials related to the art experiences of children. The emphasis will be on giving the prospective teacher a better foundation in understanding and working with art materials and concepts.

FA 326 PRACTICUM: SEMINAR (ART EDUCATION) (3) The purpose of this course is to have students participating in the practicum (art teaching) share related student teaching problems and successes. Inter-relations between student teachers and pupils will be a prime focus.

FA 331 PRACTICUM (ART TEACHING) (6-12) Teaching experience within a setting appropriate for the art certification level chosen by the student.

FA 399 INDEPENDENT STUDY (6-12) In History, Studio and Education courses. (By arrangement only.)

BIOLOGY

Chair, J. Kenneth Taylor

Gus Chrisanthopoulos, David A. Doe, Arthur E. Driscoll, Joel C. Eberlin, Betty D. Harris, David A. Lovejoy, Sanat S. Majumder, James W. Phillips, John Songdahl, Suzanne Walsh

Biology involves the collection and analysis of qualitative and quantitative data to understand living systems. These processes stress scientific reasoning using techniques such as problem solving, logical thinking and testing ideas against experience.

The department offers a biology major with courses that range from cells to ecosystems. Options in medical technology and environmental issues are also available. Courses in the common core are Biology of Organisms, Inheritance and Development, and Environmental Biology. The Human Anatomy and Physiology course meets the requirements of the Physical Education Major.

Department facilities available to students include eleven well-equipped laboratories, greenhouse, animal room, aquarium room, teaching collections of plants and animals, and electron microscope. The forest setting of the college offers ample opportunities for field study. Biology majors may pursue specialized areas of interest through the independent studies program which may include on-campus as well as off-campus projects.

BIOLOGY MAJOR

The Biology Major is required to take a minimum of 40 credits within the Department, distributed as follows:

A. Introductory Courses 0-8 credits

Depending upon the background of the student he/she may take up to eight credits of introductory (100 level) courses from the following list:

BI 102 Environmental Biology
BI 104 Biology of Organisms
BI 106 Inheritance and Development

(BI 113 Human Biology is designed primarily for Physical Education majors and may *NOT* be taken for credit in the Biology Major program.)

B. Intermediate and Advance Courses 30-38 credits

Intermediate courses (200 level) and advanced courses (300 level) have been placed into three levels of biological organization groupings. Each major must select a minimum of one course from each of these groups. In addition, at least two 300 level courses must be included in the overall major program. A suitable 3-credit Independent Study may be substituted for one 300 level course in exceptional cases.

The groupings are:

Cellular
Introduction to Genetics
*Selected Topics in Genetics
Histology I
*Histology II
*Electron Microscopy
Embryology
*Plant Growth and Development
Biochemistry
Cell Biology
Radiobiology

Organismal
Botany — Higher Plants

*300 level courses

Comparative Vertebrate Anatomy
Evolution
Microbiology
*Medical Microbiology/Immunology
Ornithology
*Mammalogy
Invertebrate Zoology
Plant Physiology
Vertebrate Physiology
Botany — Lower Plants
*Endocrinology
*Environmental Microbiology

Environmental
General Ecology
Conservation
Economic Botany
Aquatic Biology
Populations, Food, and Nutrition
Marine Biology
Environmental Legislation
*Field Ecology
*Urban Ecology

*300 level courses

C. Seminars 2 credits

A total of two of these one-credit offerings are necessary. They are usually taken in the junior or senior year from the several offered each semester under BI 234.

BIOLOGY MINOR

The student minoring in biology is required to take 18 credits in Biology, no more than eight of which can be introductory courses (100 level).

ADVISING

Biology faculty welcome the opportunity to talk to incoming students about the program. Students who decide to major in biology will be assigned a faculty advisor in the Department who can provide guidance concerning the major and related work in mathematics, chemistry, physics, secondary education and other areas of interest. Consultation at an early date will provide the possibility of taking courses which can lead toward a variety of career options.

COURSES

Waiver of prerequisites: A student with a strong background may consult with the instructor to request the waiver of any prerequisite for any course.

BI 100 LIVING NATURAL HISTORY OF MASSACHUSETTS (2) A discussion of the living natural resources of Massachusetts. The three major topics to be considered will be: forests and forestry practices, wildlife and its management, and marine and freshwater resources. Present and past interactions of human populations with these resources will be stressed throughout the course. Designed as an elective for the non-biology major.

BI 101 SCIENCE FOR THE ELEMENTARY SCHOOL (3) Direct experience with five modern elementary school science programs — Science Curriculum Improvement Study (SCIS), Elementary Science Study (ESS), Science Conceptually Oriented Program in Elementary Science (COPES), A Process Approach (S-APA), and the Minnesota, Mathematics and Science Teaching Project (Minne-MAST) — with emphasis placed on the inquiry approach as well as product, process, and attitude goals. Opportunity is provided to experiment with these programs with both children and peers.

BI 102 ENVIRONMENTAL BIOLOGY (4) An introduction to selected ecological principles, and man's interrelations with, and effects upon, the environment.

BI 104 BIOLOGY OF ORGANISMS (4) Consideration of the means by which representative plants and animals, including the human, solve problems associated with the maintenance of the individual and the species. Problems include gathering and digestion of food, gas exchange, circulation and regulation of the internal environment, reproduction, hormonal and nervous control, movement, and behavior.

BI 106 INHERITANCE AND DEVELOPMENT (4) Introduction to the study of energy transformations, cellular reproduction, inheritance and the gene, and the development of plants and animals.

BI 113 HUMAN BIOLOGY (4) Open primarily to majors in physical education. Structure and function of the human body with laboratory experience in mammalian direction and experimental physiology. May not be taken for credit by Biology Majors.

BI 201 GENERAL ECOLOGY (3) Denotes and studies physical and biological interactions and principles involved in functioning ecosystems. Includes measurement of local environmental factors and interpretation of these data. The roles of energy, raw materials, plants and animals in successional community development are stressed. Frequent field experiences and one weekend field trip.

BI 202 CONSERVATION (3) Emphasizes the scientific bases for solving current environmental management problems of energy, soil, land solid wastes, water, air, and wildlife and integrates with sociological, historical, economic, geographic, and political aspects. Each student gathers information and suggests solutions to a local environmental problem of his choice. Several field experiences and one weekend field trip.

BI 203 INTRODUCTION TO GENETICS (4) Emphasizes the Mendelian mechanisms of inheritance, sex inheritance, human heredity, chromosome mapping, and population genetics. Also included are methods for determining genetic probabilities and the analysis of statistical data. Discussions correlate current genetic research with the above, particularly as it relates to prenatal diagnosis of genetic abnormalities and the concept of eugenics in controlling gene frequencies. *Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.*

BI 205 CELL BIOLOGY (4) A study of the structure, function, and life history of cells and their components. Consideration of relationships among cell organelles and between cells and their environments. *Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.*

BI 207 EMBRYOLOGY (4) A study of vertebrate embryo development, including developmental patterns and the emergence of form and function as an expression of genetic endowment. Special attention is paid to the avian and mammalian morphogenesis. *Prerequisite: One semester of introductory biology.*

BI 208 MARINE BIOLOGY (4) An in-depth investigation of the various marine ecosystems such as sand, mud, and rock intertidal areas, salt marshes, estuaries, coral reefs, and mangrove forests; also the neritic, pelagic, and benthic regions of the open ocean. Includes the numerous interactions between biotic and abiotic factors present. Adaptations of life forms for survival in these environments will be discussed. Also includes laboratory exercises, including establishing, maintaining and analyzing a salt water aquarium, plus field trips to the coast. *Prerequisite: one semester of Introductory Biology.*

BI 210 HISTOLOGY I (4) Study of the microscopic structure and function of animal tissues with emphasis upon the mammal. An introduction to the basic principles of microtechnique. *Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.*

BI 211 BOTANY — HIGHER PLANTS (4) Describes the course of the evolution of the vascular plants as deduced from their comparative morphology. Emphasis is placed on the adaptive mechanisms which have allowed these plants to spread and diversify on land, and their subsequent importance to man. Laboratory emphasis on plant anatomy, propagation, nutrient and tissue culture, and plant classification. *Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.*

BI 213 BOTANY — LOWER PLANTS (4) Explores the morphology, evolution, and functional activities of the non-seed plants, with emphasis on the Fungi and Algae. Material includes life cycles, and the ecology of these groups as they relate to their roles in maintaining the cyclical relationships between the living and non-living worlds: i.e., food chains, decay, sewage disposal, pollution. Laboratory work includes field trips whenever practical and the collection and examination of living material. *Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.*

BI 215 ECONOMIC BOTANY (4) Plants in relation to human welfare. Students will examine how, since the dawn of civilization, man has associated himself with plants as sources of food, fiber, forage, as well as medicines. Special emphasis will be placed on the intrinsic overlap between ecology and economy in today's world. *Prerequisite: One semester of introductory biology.*

BI 217 INVERTEBRATE ZOOLOGY (4) Study of representative groups of invertebrates, including the phylogenetic relationships and the morphology, physiology and natural histories of selected individual animals. *Prerequisite: One semester of introductory biology.*

BI 219 AQUATIC BIOLOGY (4) Survey covering the biological, chemical, and physical considerations of inland waters with emphasis on the environmental relationships, identification, and natural history of indigenous aquatic organisms. Considerable work is done in the field. *Prerequisite: One semester of introductory biology.*

BI 221 VERTEBRATE PHYSIOLOGY (4) Recognition and interpretation of the integration of function in the organ systems of the vertebrate animal in relation to environmental influences. *Prerequisite: Two semesters of introductory biology; two semesters of General Chemistry or permission of instructor.*

BI 223 MICROBIOLOGY (4) An introductory study of the microorganisms with emphasis on Bacteriology. Consideration of clinical and environmental aspects, principles of structure, metabolism, and genetics of procaryotes. Laboratory includes basic techniques for study, enumerations and identification of bacteria. *Prerequisite: Two semesters of introductory biology or one semester and permission of instructor.*

BI 225 RADIOBIOLOGY (4) The study of principles, mechanisms, and effects of ionizing radiation at the molecular, cellular, organ, organism and community levels. *Prerequisite: One semester of introductory biology, one semester of General Chemistry, one semester of Physics desirable.*

BI 227 COMPARATIVE VERTEBRATE ANATOMY (4) A study of the anatomy and phylogeny of the vertebrates. Lecture topics will include gross anatomy and consideration of evolutionary trends among the vertebrates. Laboratory work will consist primarily of the dissection of representative species. *Prerequisite: One semester of introductory biology.*

BI 230 EVOLUTION (3) A discussion of theories of evolution, evidence for evolution, genetic variability and changes in populations, and evolutionary patterns of the past. *Prerequisite: One semester of Introductory Biology.*

BI 231 PLANT PHYSIOLOGY (4) Deals with fundamental physiological processes vital to plant life. Topics such as water regulation, photosynthesis, respiration, and development will comprise the bulk of the course-content. Specialemphasis will be placed on various experimental methods that include use of research equipment and statistical analysis. Each student may be assigned an independent research project at the beginning of the semester. *Prerequisite: Two semesters of introductory biology, one semester of General Chemistry.*

BI 233 ENVIRONMENTAL LEGISLATION (3) A detailed examination of the need for, and biological basis for, the standards established by existing, or proposed, federal and state legislation. The lectures, which will deal with topics such as the National Environment Policy Act and the Water Pollution Control Act, will be supplemented by analysis and discussion of environmental impact statements and court decisions dealing with each of the topics covered. *Prerequisite: One semester of introductory biology and at least one of the following: General Ecology or Conservation or permission of instructor.*

BI 234 BIOLOGY SEMINAR (1) Topics will vary depending on availability of staff and student interest. Primarily for juniors and seniors. *Prerequisite: Permission of instructor.*

BI 235 ORNITHOLOGY (4) An intermediate course focusing on the evolution, ecology and distribution, life history and economic importance of the class Aves. Laboratories will emphasize field experience for the identification of local and migratory species, and the study of the anatomy and physiology of birds. Grades will be based upon lectures and laboratory exams. *Prerequisite: One semester of biology or permission of instructor.*

BI 237 HUMAN ANATOMY AND PHYSIOLOGY I (3) Utilizes a general approach to the human body with emphasis on structure and function to show ways in which various organ systems interact. The integumentary, skeletal, muscular, and nervous systems are studied. Course is not for credit toward the biology major. *Prerequisite: One of the following: Introduction to Chemistry, Introduction to Physics, General Chemistry, or Physics I. It is also recommended that a student take Biology of Organisms.*

BI 239 HUMAN ANATOMY AND PHYSIOLOGY II (3) Utilizes a general approach to the human body with emphasis on structure and function to show ways in which the various organ systems interact. The respiratory, circulatory, digestive, and endocrine, temperature regulation and fluid balance are studied. Course is not for credit toward the biology major. *Prerequisite: Human Anatomy and Physiology I.*

BI 301 PLANT GROWTH AND DEVELOPMENT (4) Project-oriented. Specific studies dealing with the physiology of germination, dormancy, growth-retardation, hormonal actions, tissue culture, and propagation will be taken up with corresponding short-term projects. Special consideration will be given to the effects of environmental pollution on plant growth. *Prerequisite: Two biology courses at the intermediate (200) level, one of which must be Plant Physiology or Botany—Higher Plants.*

BI 303 MEDICAL MICROBIOLOGY/IMMUNOLOGY (4) A study of medically important microorganisms, their mechanisms of pathogenicity, and host resistance. Primarily designed for medical technology students and those pursuing related health careers. The course attempts to correlate the characteristics of microorganisms with the production of disease, and examines the mechanisms of host resistance and the development of immune responses. *Prerequisite: BI 223.*

BI 304 ENVIRONMENTAL MICROBIOLOGY (4) A study of the interrelationship of microorganisms with the environment. Consideration of the role of microorganisms in pollution and pollution abatement, industrial processes, agriculture, and ecology. *Prerequisite: BI 223 or permission of instructor.*

BI 305 FIELD ECOLOGY (4) An advanced course in ecology with strong emphasis on field studies and related laboratory work. Topics will include techniques in observation, collection, and identification of organisms, and the physical and biological description of natural area. Field trips required. *Prerequisite: One semester of introductory biology, General Ecology.*

BI 312 MAMMALOGY (4) The identification, classification, evolution, ecology, and physiology of mammals with emphasis on New England forms. Laboratory work will include an introduction to the common techniques used in mammalogy, experimentation, and identification of the skins and skulls of the local fauna. *Prerequisite: Two zoology courses at the intermediate (200) level, one of which must be Comparative Vertebrate Anatomy, Vertebrate Physiology, or Evolution.*

BI 316 URBAN ECOLOGY (4) An examination of the interactions of humans and their structures (buildings, roads, etc.) and activities with the natural environment in an urban setting. Lecture topics will include urban climates, air pollution, and water supply and disposal. Laboratories will emphasize field experience. *Prerequisite: One semester of introductory biology, General Ecology.*

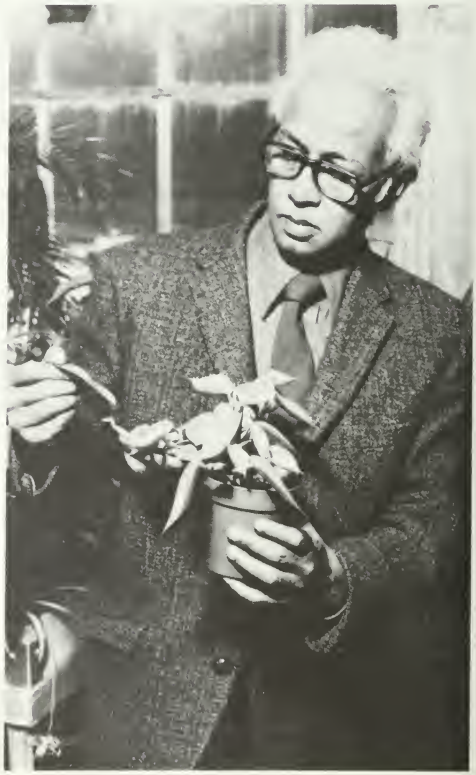
BI 318 HISTOLOGY II (4) Study of the microscopic structure and function of organs with emphasis upon the vertebrates. Laboratory experience will include histological, histochemical, and other appropriate techniques. Reading and discussion of selected papers from scientific journals. *Prerequisite: Histology I, two semesters of General Chemistry.*

BI 320 ENDOCRINOLOGY (4) A study of the evolution of hormones and their physiological role in nutrition, osmoregulation, metabolism, and reproduction. *Prerequisite: Two semesters of General Chemistry and one of the following: Comparative Vertebrate Anatomy, Vertebrate Physiology, Embryology, Histology I.*

BI 322 ELECTRON MICROSCOPY (4) Consideration of research frontiers in biological fine structure will include practice in the basic techniques of the transmission electron microscope and will focus on analysis of the capabilities and limitations of the instrument. *Prerequisite: Cell Biology or Histology I.*

BI 326 GENETICS II (3) Includes the chemistry of DNA, RNA, and amino acids, regulation of protein and antibody synthesis, the genetic code, the concept of template surfaces, the operon theory and embryology at the molecular level. Builds upon and expands the understanding of Mendelian genetics and emphasizes bacterial and viral genetic research. *Prerequisite: Introduction to Genetics.*

BI 399 INDEPENDENT STUDIES (1-3 credits per semester) Directed study in biology with the student conducting a library, field, or laboratory research project under supervision of an instructor. A total of six credits may be applied toward the undergraduate degree. *Prerequisite: Permission of instructor.*



COMPUTER AND INFORMATION SCIENCE

Chair, Robert A. McGuigan, Jr.

Timothy J. Bergendahl, Wayne Brown, James Carabetta, Robert Cormier, James Jackowski, Anne D. Pasquino, Teresa Wu, Walter L. Griffith, Gilbert Gonsalves

Affiliated Faculty: William D. Bennett, Susan Dutch, Ronald R. Edwards, Dianne Haber, Alphonse J. Jackowski, Andrew S. Kim, Karl K. Leiker, Catherine Lilly, Patrick V. Romano, Samuel T. Scott

Computer Science, an interdisciplinary subject, emphasizes the construct and function of the modern digital computer and the use of the computer for information processing. At Westfield State College strong relationships exist between the Department and Computer and Information Science and other departments such as Mathematics, Criminal Justice, Economics and Business Management, Geography and Regional Planning, Psychology, and Physical Science. These relationships have resulted in the creation of courses such as Computer Security and Computer Mapping.

The computer hardware and software available at Westfield State College is unparalleled for a college its size in the United States. Major hardware includes 2 Control Data Corporation Cyber 172 mainframes, a Control Data Corporation Cyber 18 minicomputer, a Digital Equipment Corporation VAX 11-750 minicomputer system, a DEC PDP-11/24 minicomputer running the UNIX operating system, and numerous microcomputers (4 DEC RT 11's, DEC Rainbow 100's, Leading Edge, Apples, Commodores, etc.). The software is extensive and includes BASIC, FORTRAN, PASCAL, COBOL, PL/1, and RPG 11 compilers. Languages such as LISP, PROLOG, and SNOBOL 4 are also supported. Available assembly languages include VAX Assembler, Macro-11, Wang Assembler, MIX, and COMPASS. As a member of the Massachusetts State College Computer Network, the College has available an extensive collection of library packages (statistics, CAI, etc.). The 70+ academic computer terminals are distributed at various locations on campus, including residence halls.

Student chapters of the DPMA (Data Processing Managment Association) and the ACM (Association for Computing Machinery) are sponsored by the Department of Computer and Information Science.

REQUIREMENTS

CS 102	Computers in the Modern World	3 credits
CS 120	Computer Science I (Pascal)	3 credits
CS 121	Computer Science II (Pascal)	3 credits
CS 206	Assembly Language Programming	3 credits
CS 320	Data Structures and Algorithm Analysis	3 credits
CS 330	Computer Architecture	3 credits
CS 339	Operating Systems	3 credits
CS 302	Computer Science Seminar This 1-credit experience is to be taken a total of four (4) times	4 credits
MA 105	Calculus I	3 credits
MA 106	Calculus II	3 credits
MA 118	Linear Algebra	3 credits
MA 220	Discrete Structures	3 credits

Plus any two of the following 3-credit courses

MA 201	Calculus III	)
MA 305	Probability Theory	)
MA 311	Theory of Numbers	)
MA 333	Applied Statistics and Experimental Design	)
MA 334	Operations Research	)
MA 335	Introduction to Numerical Methods	)
MA 338	Statistical Theory	)

43 TOTAL CREDITS

COURSES

CS 101 COMPUTERS IN SOCIETY (3) Offers an elementary conceptual introduction to the nature and function of computers, but the main emphasis of the course will be on the impact of the use of computers in such areas as national security, societal services, automation, transportation, communication, education, personal privacy, employment, and biological sciences.

CS 102 COMPUTER SCIENCE IN THE MODERN WORLD (3) Provides an overview of computer science. The student is introduced to computer systems, software design, and computer architecture. The intellectual, social, legal, and human issues involved in the use of computers in modern society are examined. The course is to be taken concurrently with Computer Science I and is for majors only. *Prerequisites: High school mathematics through trigonometry or MA 104.*

CS 117 INTRODUCTION TO COMPUTER PROGRAMMING (3) An introduction to basic concepts and techniques of computer programming for the student not majoring in mathematics or computer science. Topics to be studied include programming in BASIC, the solution of a variety of problems with the computer, and applications of computer programming and modelling to non-mathematical fields.

CS 118 APPLICATIONS PROGRAMMING (FORTRAN) (3) An introduction to FORTRAN designed for students not majoring in mathematics or computer science. Applications will be drawn from a variety of primarily non-mathematical subjects. Some standard library programs will be considered. Several programming projects will be assigned.

CS 120 COMPUTER SCIENCE I (3) A theoretical introduction to computer science designed for majors and minors. Elements of the PASCAL language are included. Emphasis is placed upon structured programming techniques and common algorithms. Extensive programming experience is obtained employing the DEC VAX 11/750 as the host computer.

CS 121 COMPUTER SCIENCE II (3) A continuation of CS120. Fundamentals of data structures are introduced. Emphasis is placed upon file manipulation and data base concepts. PASCAL is the host language and the DEC VAX 11/750 is the host computer. Several complex programming projects are assigned. *Prerequisite: CS120.*

CS 125 PRINCIPLES OF BUSINESS DATA PROCESSING (3) Provides an introduction to computer systems and data processing concepts, with special emphasis on the applications of computers in business organizations. Includes an overview of data processing concepts, computer hardware, software, and programming languages; an introduction to computer systems configuration to include operating systems and data communications; an introduction to systems analysis and design; and a comparison of computer based processing, management information, and decision support systems. A hands-on component will introduce the student to the college's computer system, requiring entry, editing and execution of programs written in programming languages commonly used in business.

CS 200—CS 205 PROGRAMMING MINI-COURSES (1) Several one-credit courses have been developed to expose the student to selected software. Modules exist in the following areas. LISP, SNOBOL4, GPSS, APL, RPG II, and PL/1. Several programming assignments are associated with each module. *Prerequisite: Knowledge of at least one high-level programming language.*

CS 205 COBOL I (3) Provides an introduction to the COBOL language and covers the most important features of the Identification, Environment, Data, and Procedure Divisions of a COBOL program. Extensive programming experience is obtained via business-related computer applications. Table handling and sorting will be included in CS205. *Prerequisite: One previous programming course.*

CS 206 ASSEMBLY LANGUAGE PROGRAMMING (3) An in-depth study of the internal instructions, organization, and operations of the modern digital computer. The host computer will be the Digital Equipment Corporation VAX 11/750 and the assembly language for this system will comprise approximately 70% of CS206. A second computer system, such as the Wang VS-80, will be explored at the assembly language level. The selection of the second computer system will be at the discretion of the instructor. *Prerequisite: Knowledge of a high level programming language.*

CS 208 COBOL II (3) A continuation of CS205. Emphasis is placed on master file updating, methods of file organization, and report writer features. Numerous business-related programming assignments of an advanced nature are performed. *Prerequisite: CS205.*

CS 261 COMPUTER APPLICATIONS WITHIN A CRIMINAL JUSTICE ENVIRONMENT (3) This course will use BASIC as the host language and will serve to expose the student to some aspects of COBOL (to be developed during the course). Emphasis will be placed upon creation and maintenance of criminal justice data bases, fingerprint identification via computer, and suspect composite drawings via computer. *Prerequisite: CS117.*

CS 290 COMPUTER SECURITY (3) The security of computer systems will be examined from three perspectives: risk identification, risk evaluation, and risk control. Risk identification will be explored in terms of the "onion skin" approach, methods of risk identification, and computer related fraud. Risk evaluation will involve an exploration of probability and impact and approaches to risk evaluation; risk control will focus on such issues as strategy, cost-effectiveness, and contingency planning. *Prerequisite: CS117 and CJ207 and MG104 or equivalent.*

CS 302 COMPUTER SCIENCE SEMINAR (1) Focuses on current topics in computer science and allied fields. By means of individual presentations, group, or panel discussions, a variety of aspects and issues of this discipline will be explored. This course can be repeated for credit (up to a maximum of four credits). *Prerequisite: Sophomore standing and permission of instructor.*

CS 320 DATA STRUCTURES AND ALGORITHM ANALYSIS (3) A one semester course which applies analysis and design techniques to fundamental algorithms which act on data structures. Provides a sound theoretical basis for applications to data base management systems, operating systems, and compiler construction. Topics to be covered include basic concepts of data, sequential file structure, linear lists and strings, arrays and orthogonal lists, tree structures, searching and sorting techniques, and recursive algorithms. *Prerequisite: CS 121.*

CS 330 COMPUTER ARCHITECTURE (3) Computer architecture involves several concepts including computer system organization, addressing techniques, memory allocation, and input/output structures. Topics include digital logic, combinatorial synthesis, and analysis and the use of several of the most common sequential circuits. Some simulations of networks and architectures will be developed. Prerequisites: CS 121, CS 206, PS 137.

CS 339 OPERATING SYSTEMS (3) An operating system is an organized collection of programs that act as an interface between machine hardware and users. Topics to be discussed include I/O programming, memory management, processor management, and file systems. *Prerequisite: CS 320 and CS 330.*

CS 340 CYBERNETICS (3) Cybernetics can be described as the interface of brains (human & animal), computers, and machines. This course explores the topic from two perspectives, brain theory (BT) and artificial intelligence (AI). Topics such as the human brain, neurology, neurotransmitters, brain modelling via computer, and search paradigms are examined. *Prerequisites: Knowledge of at least one high level programming language and an interest in biology or psychology.*

CS 345 PRINCIPLES OF SYSTEMS PROGRAMMING (3) The writing of software such as compilers, assemblers, and operating systems is the task of the systems programmer. This course will examine several algorithms which are of importance to the systems programmer and the methods by which these algorithms can be programmed using PASCAL. Students will be required to write an assembler and a portion of a hypothetical operating system. *Prerequisites: CS 121, CS 206, and CS 320.*

CS 350 ARTIFICIAL INTELLIGENCE (3) A survey of artifical intelligence, including AI languages, applications of data structures, interaction with the external environment, and expert systems. *Prerequisite: CS 320.*

CS 351 INTRODUCTION TO THE THEORY OF COMPUTATION (3) Presentation of topics of current theoretical interest in computer science chosen from among context-free languages and grammars; finite automata, Turing machines, cellular automata and other models of computers; computability theory; and computational complexity. *Prerequisite: MA 220 or equivalent, and CS 121.*

CS 395 COMPUTER SCIENCE INTERNSHIP I (3) An on-campus internship experience for computer science majors. This experience will involve 8-10 hours/week of consulting at the main computer terminal room at the College. *Prerequisite: Permission of the Computer Science Coordinator.*

CS 396 COMPUTER SCIENCE INTERNSHIP II (3) An internship experience which may be on or off campus depending on availability. Students might participate in a major MIS design project on-campus or might be interning at a business location in the Greater Springfield Area. *Prerequisites: CS 395 and permission of the Computer Science Coordinator.*

ASSOCIATED COURSES

DEPARTMENT OF CRIMINAL JUSTICE

CJ 200 ECONOMIC CRIME
CJ 207 ISSUES IN CONTEMPORARY SECURITY
CJ 305 PRINCIPLES OF EVIDENCE AND PROOF

DEPARTMENT OF GEOGRAPHY AND REGIONAL PLANNING

GE 210 COMPUTER MAPPING
GE 212 STATISTICAL PACKAGES FOR SOCIAL SCIENTISTS (SPSS)

DEPARTMENT OF MATHEMATICS

All MA-labeled courses

DEPARTMENT OF PHYSICAL SCIENCE

PS 137 INTRODUCTION TO DIGITAL ELECTRONICS
PS 301 MICROPROCESSORS/HARDWARE AND SOFTWARE

CRIMINAL JUSTICE

Chair, L. Michael McCartney

Victor H. Ascolillo, Kenneth W. Bowser, R. Bruce Carroll, Norman Greenberg, Joseph J. Hanrahan, John J. Jones, Alida V. Merlo

The goal of the Criminal Justice program is to develop among present and future employees of the criminal justice system an increased awareness of the role of law enforcement, courts, and corrections, and a better understanding of the socio-political and economic forces which influence that system.

Criminal Justice majors are able to apply for an internship and work in a criminal justice related agency or organization during their senior year. All students who apply for an internship are carefully evaluated by the criminal justice faculty to establish their suitability for placement. Student interns have been placed throughout New England and in California, Arkansas, and the District of Columbia.

The program is designed to serve both those students who may elect to enter the criminal justice profession immediately upon graduation and those students who desire to pursue graduate work.

REQUIREMENTS FOR CRIMINAL JUSTICE MAJORS

The Criminal Justice major consists of 39 credits. All students must take 21 Criminal Justice credithours at Westfield State College. The Introductory Sequence and the course Research Methods are required of all students.

INTRODUCTORY SEQUENCE

INTRODUCTION TO CRIMINAL JUSTICE (3)

LAW ENFORCEMENT AND SOCIETY (3)

AMERICAN JUDICIAL SYSTEM (3)

INTRODUCTION TO CORRECTIONS (3)

RESEARCH METHODS (3)

CRIMINAL JUSTICE MAJOR ELECTIVES (24)

COURSES

CJ 101 INTRODUCTION TO CRIMINAL JUSTICE (3) A survey of the American Criminal Justice System as a socio-political institution. The police, criminal courts, correctional and rehabilitative endeavors will be analyzed within the framework of empirical research development and perspectives of the social sciences. Required of all Freshmen in the Criminal Justice major.

CJ 201 LAW ENFORCEMENT AND SOCIETY (3) The structure and function of law enforcement agencies in contemporary society will be analyzed in their sociological context. Particular emphasis will be placed on the role of the police within the framework of the Criminal Justice System. *Prerequisite: CJ 101 or its equivalent.*

CJ 202 INTRODUCTION TO CORRECTIONS (3) An in-depth examination of the American Correctional System. Traditional punitive measures will be analyzed in relation to current reintegration alternatives. *Prerequisite: CJ 101 or its equivalent.*

CJ 203 THEORIES OF SOURCES AND FUNCTIONS OF CRIMINAL LAW (3) The function of criminal law and its relationship to various criminal offenses, including crimes against persons and crimes against property. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 204 PRINCIPLES OF CRIMINAL INVESTIGATION (3) The science of investigation of crimes, laboratory techniques, interpretation of data, and elements of specific crimes. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 205 AMERICAN JUDICIAL SYSTEM (3) An examination of the development of law and the American legal system. The problems related to the meaning and uses of law; the organizational hierarchy of the courts; and the role of the courts in the criminal justice system. *Prerequisite: CJ 101 or its equivalent.*

CJ 206 CRIME IN THE CITY (3) An examination of the distribution and crime patterns within an urban area. Particular emphasis will be placed on theoretical and environmental causes of urban crime. Additionally, this course will attempt to focus on urban policies that address the problems of crime in the city. Analysis of victim-precipitated crime, concentric zone theory, and urban migration, will be among the issues considered. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 207 ISSUES IN CONTEMPORARY SECURITY (3) An overview of security systems applicable to contemporary industrial and commercial demands. Losses through physical, technological and personnel hazards are viewed as preventable phenomena if vulnerabilities are recognized and ameliorative measures taken. Counter-measures will be weighed within the framework of loss criticality and cost of effectiveness. *Prerequisite: CJ 101 or its equivalent.*

CJ 301 JUVENILE PROCEDURE (3) An examination of the underlying philosophy of juvenile justice and procedures used to process a juvenile alleged to be deliquent through the juvenile justice system; will focus on the differences between juvenile procedure and adult criminal procedure by examining recent court decisions and statutory law pertaining to juveniles. *Prerequisite: CJ 101, 201, 205, 202 or their equivalent.*

CJ 303 PATTERNS OF CRIMINALITY (3) The U.S. Department of Justice Index Crimes will be studied along with other crimes, which will be selected on the basis of their contemporary administrative significance and their effect on the criminal justice system in particular. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 304 PREVENTION AND CONTROL (3) An in-depth examination of the criminal justice system and the efforts it has exerted in an attempt to prevent and control criminal behavior. Course will focus on the traditional methods including probation and parole as well as recent trends in crime control and prevention: the utilization of community based treatment programs and attempts by many criminal justice agencies to avoid the processing of individuals through the system. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 305 PRINCIPLES OF EVIDENCE AND PROOF (3) The study of the different types of evidence relevance, the hear-say rule and its exceptions, impeachment and cross-examination and privileged communications. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 306 CONTEMPORARY PROBLEMS IN CORRECTIONS (3) An intensive analysis of selected problems in institutional and community corrections. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 307 CONTEMPORARY PROBLEMS IN LAW ENFORCEMENT (3) An intensive analysis of selected problems in American Law enforcement and police-community relations. A major research paper is required. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 308 RIGHTS OF THE CONVICTED (3) An examination of the legal rights of the individual who has been convicted of a crime. This lecture course will focus specifically on both federal and state laws and court decisions dealing with the legal rights of probationers, confined prisoners, and parolees in the American criminal justice system. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 310 ORGANIZED AND WHITE COLLAR CRIME (3) The methods through which organized crime influences and, in many instances, controls entire communities. Traditional types of crime heavily influenced by organized crime, such as loan sharking and gambling, will be analyzed in an effort to demonstrate the basis of power and wealth of organized crime in the United States. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 311 VICTIMOLOGY (3) Criminal-victim relationships, with emphasis on victim-precipitated crimes and compensation to the victims. Consideration is given to: concept and significance of victimology; time, space, sex, age, and occupational factors in criminal-victim relationships; victims of murder, rape, other violent crimes and property crimes; victim typology; the public as victim; restitution and compensation to victims. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 312 WOMEN AND THE LAW (3) An examination of the female and her involvement with the legal processes in the United States. Attention will be focused on the female as the offender and as the victim. Analysis of the various theoretical approaches to understanding the female offender will be presented in addition to an exploration of the recent literature on the female and the criminal justice system. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 313 QUANTITATIVE METHODS IN CRIMINAL JUSTICE (3) Examines the relationship and application of statistical techniques to theory building and concept construction. Gives an overview of statistical methods and their appropriateness for research in criminal justice. In addition, various computer-oriented analytical tools and data processing systems available to the criminal justice practitioner will be surveyed. *Prerequisite: CJ 331 or its equivalent.*

CJ 314 SEMINAR ON OFFENDER REHABILITATION (3) The "nothing works" doctrine generated by the controversial *Martinson Report* has resulted in considerable confusion regarding the effectiveness of corrections programs designed to elicit specific behavioral changes on the part of the correctional client. This course will thoroughly examine the debate surrounding the "nothing works" doctrine and present those methods of rehabilitation that have proven effective in the treatment of offenders. Probation, parole and programs for the incarcerated offender will be the primary focus of this course. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 315 STRESS AND THE CRIMINAL JUSTICE SYSTEM (3) An intensive examination of the interpersonal stresses indigenous to Criminal Justice practitioners. Stress management within Criminal Justice organizations will be considered in terms of the administrative and functional problems encountered. Special attention will be given to the criminal justice environment which deals with social service and control on a twenty-four hour basis. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 316 CIVIL LIABILITIES OF CRIMINAL JUSTICE PROFESSIONALS (3) The civil liability for harm inflicted on another. Topics to be considered will include: intentional torts such as assault, battery, and false imprisonment; negligence; torts of strict liability; libel, slander and defamation; liability of owners and occupiers of land; and the liability of state and federal employees for harm caused in their respective professional capacities. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 317 EVOLUTION OF AMERICAN LAW ENFORCEMENT (3) A critical analysis of the contemporary American law enforcement establishment in relation to the evolutionary forces that have contributed to its development. Excepting modern technology, the law enforcement function tends to run in predictable cycles. Traditional in origin, these cyclical phenomena may be observed in the patterns of older societies. Reflections of the past are deemed vital to a more objective and well-rounded perception of current issues.

CJ 318 SPECIAL TOPICS IN CRIMINAL JUSTICE (3) Contemporary analysis of topical criminal justice problems or programs of special interest because of state, federal or international events. The instructor will select an area of study which merits special investigation because of contemporary factors in the external environments in which the criminal justice system must operate. The instructor will relate the special topic to traditional materials, but will emphasize how current circumstances give to it a unique nature. *Prerequisite: CJ 101, 201, 202, 205, or their equivalent.*

CJ 319 ECONOMIC CRIME (3) The manner in which professionals in business are able to manipulate and control computer systems and engage in various types of white collar crime will be examined. Emphasis will be placed on consumer and computer fraud, embezzlement, and particular attention will be focused on corporate crime and on the criminal justice system's attempts to identify, prevent, and control it. *Prerequisite: CJ 201, 202, 205, or their equivalent.*

CJ 320 CRIMINAL PROCEDURE: FOURTH AMENDMENT RIGHTS OF THE ACCUSED (3) A study of due process, the exclusionary rule, and the legal problems associated with arrests, searches, and seizures. *Prerequisite: CJ 205 or its equivalent, or permission of instructor.*

CJ 321 CRIMINAL PROCEDURE: FIFTH AND SIXTH AMENDMENT (3) A study of the legal problems associated with interrogations, confessions, entrapment, lineups, and wiretapping and electronic surveillance. *Prerequisite: CJ 205 or its equivalent or permission of the instructor.*

CJ 330 CRIMINAL JUSTICE ADMINISTRATION (3) An appraisal of the organization and procedures within criminal justice agencies and consideration of the principles of organization and methods adopted by progressive agencies to insure effective criminal justice service to the community. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 331 RESEARCH METHODS IN CRIMINAL JUSTICE (3) An introduction to scientific methodology as related to criminal justice. The course will focus on the development of hypotheses, data collection, data analysis and hypothesis verification. Attention is also given to basic statistical techniques appropriate for criminal justice research. *Prerequisite: CJ 101, 201, 205, 202, or their equivalent.*

CJ 384 CASE STUDY SEMINAR: ADULT OFFENDERS (3) An eight-week class examining the life history of specific adults convicted of committing crimes, their attitudes, associates, criminality, and interaction with the criminal justice system. Each student concentrates on a different individual. Connections between the case material and principal theories about the origins of crime, intervention strategies, and criminal justice institutions also will be considered. A field experience will normally be provided. *Prerequisite: CJ 205, or permission of instructor and Junior status or better. Cannot be taken concurrently with CJ 385.*

CJ 385 CASE STUDY SEMINAR: JUVENILE OFFENDERS (3) An eight-week class examining the life history of specific juveniles implicated in one or more delinquent acts, their attitudes, associates, delinquency, and interactions with the criminal justice system. Each student concentrates on a different individual. Connections between the case material and principal theories about the origins of crime, intervention strategies, and criminal justice institutions also will be considered. A field experinces will normally be provided. *Prerequisite: CJ 205 or permission of instructor and Junior status or better. Cannct be taken concurrently with CJ 384.*

CJ 398 FIELD PRACTICUM IN CRIMINAL JUSTICE (6) The field practicum class involves the student's participation in the day-to-day functions of a publicly funded criminal justice agency. The course is designed to provide students with an opportunity to translate the theoretically oriented classroom experience into practical application. Consists of either 8 weeks of full-time placement or 16 weeks of part-time placement. *Prerequisite: Permission of the Instructor.*

Dr. John F. Nevins with Elizabeth A. Murphy, Westfield State College class of 1982: first woman to graduate at the top of the class of the Massachusetts State Police Academy

ECONOMICS AND BUSINESS MANAGEMENT

Chair, Russell P. Bellico

Coordinator of Business Management, Kathleen P. Pellegrino

Gerald Cahill, John Darrow, William Donovan, Philip Ettman, Michael Gural, Gerald Healy, Barry Hiney, Maureen Kane, Nancy Kotzen, Thomas McFarlin, Gary Merlo, Oommen Thomas, John R. Wagner

The Department of Economics/Business Management offers two majors, leading to a B.A. in Economics or to a B.S. in Business Management.

Economics is a problem-based social science dealing with the relevant contemporary issues of unemployment, inflation, monopoly, pollution, income distribution, and productivity. Economics utilizes models, or simplifying constructs, for organizing facts in an effort to develop policy alternatives. The strength of economics is its ability to provide a logical, ordered way of looking at various problems and issues.

Business is the applied science of the possible in the economic world. Management principles serve as guidelines to achieve more effective and efficient performance in business organizations. Business Management offers a clear direction in the pursuit of knowledge in producing, directing, financing, and promoting products and services.

Varied in their objectives and flexible in orientation, the Economics and Business Management programs are geared to prepare undergraduates for successful entry into the job market. In addition, the Economics program gives students the analytical foundation for graduate study in economics, business administration, public administration, urban planning, and related disciplines. The Business Management program provides a sound background in the areas of accounting, finance, management, marketing, and labor relations. This program builds a solid framework for graduate work in business administration, law, public administration, and other fields. Business Management is also an area for certification in the Secondary Education program.

The department's internship program is intended to allow students to apply analytical classroom material to practical experience. Acceptance into an internship program is reserved for seniors with demonstrated academic competence.

REQUIREMENTS FOR ECONOMICS MAJORS

The department accepts as economics majors only those students who have demonstrated a basic level of ability and interest in economics. Specifically, admission requirements are a C+ average in Principles of Macroeconomics and Principles of Microeconomics or an overall 2.6 Quality Point Average.

REQUIRED COURSES

EC 101 Principles of Macroeconomics
EC 102 Principles of Microeconmics
EC 201 Microeconomic Theory
EC 202 Macroeconomic Theory
EC 204 Introduction to Mathematical Economics
MA 108 Elementary Statistics
MA 115 Mathematics for Business and Social Sciences

Electives in Economics

EC 300 Money and Banking
EC 301 State & Local Finance
EC 302 Economic History of United States
EC 303 Economics of Development
EC 304 Urban Economics
EC 305 Introduction to Econometric Methods
EC 306 Managerial Economics
EC 311 Economic Fulctuations and Business Forecasting
EC 312 Labor Economics

EC 314 Industrial Organization
EC 315 Public Finance
EC 316 Economic History of Europe
EC 317 Comparative Economic Systems
EC 318 International Economics
EC 319 Development of Economic Thought
EC 350 Contemporary Economic Issues
EC 398 Senior Research Seminar
EC 399 Independent Study (3-6 credits)

ECONOMICS MINOR

The Economics minor program is intended for non-economics majors who choose to achieve some proficiency in economic analysis. It involves a minimum of eighteen credits in Economics.

REQUIREMENTS FOR BUSINESS MANAGEMENT MAJORS

BUSINESS CORE 33 CREDITS

MG 107 Software Applications in Management
MG 121 Business Management
MG 104 Principles of Accounting I
MG 105 Principles of Accounting II
MG 241 Business Law
MG 207 Financial Management
MG 231 Marketing Management
MG 220 Production/Operations Management
MG 250 Quantitative Approach to Business Decisions
MG 338 International Business
MG 325 Business Policy and Strategy

NON-BUSINESS REQUIRED COURSES 18 CREDITS

EC 101 Macroeconomics
EC 102 Microeconomics
MA 115 Math for Business & Social Science
MA 108 Statistics
EN 103 Speech
EN 392 Business & Technical Writing

BUSINESS CONCENTRATIONS (NOT MORE THAN ONE CONCENTRATION PER STUDENT) 15 CREDITS

ACCOUNTING

MG 315 Intermed. Account. I
MG 316 InterMed. Account. II
MG 317 Cost Accounting
MG 311 Auditing
MG 310 Federal Income Taxation

MANAGEMENT

MG 321 Mgmt. Inform. Systems
MG 301 Labor Relations
MG 308 Organiz. Dev't. & Beh.
2 — 300 Level Management
Electives

MARKETING

MG 307 Marketing Research Techniques
MG 308 Distribution Management
MG 309 Sales and Sales Management
2 — 300 Level Marketing Elective

FINANCE

MG 318 Advanced Manag. Finance
MG 320/EC 203 Money and Banking
MG 312 Investments
2 — 300 Level Finance
Electives

LABOR

MG 314 Human Resource Mgt.
MG 301 Labor Relations
MG 313 Collective Bargaining
2 — 300 Level Labor
Electives

COURSES

ECONOMICS

EC 101 PRINCIPLES OF MACROECONOMICS (3) An introduction to economic analysis with emphasis on the application of economic principles to an understanding of contemporary problems. Topics to be discussed include: the nature of a market economy; national income, employment and fiscal policy; characteristics of the American monetary and banking system; economic growth and international trade.

EC 102 PRINCIPLES OF MICROECONOMICS (3) Emphasis on the economics of the firm and resource allocation. Topics to be discussed include: the price and output determination under pure competition, pure monopoly, monopolistic competition, and oligopoly; the resource market, general equilibrium analysis; and an evaluation of American capitalism.

EC 201 MICROECONOMIC THEORY (3) An examination of the basic assumptions and methods of analysis employed in microeconomic theory. Topics studied include elasticity concepts, demand derivation, production and cost relationships, pricing under various market structures, and distribution theory. These topics are integrated through short and long-run analysis as applied to the firm and industry. Lecture and exercises of concepts is included. *Prerequisite: EC 102.*

EC 202 MACROECONOMIC THEORY (3) Analysis of the level of national income, employment, price level and the rate of growth in the economic system. Includes analysis of consumption and saving, factors affecting private investment, prosperity and depression, interactions between money and national income, implications for public policy. Lecture, discussion and exercise work. *Prerequisite: EC 101.*

EC 203 MONEY AND BANKING (3) A study of the relations, institutions, policies, and problems of the American monetary system. The course covers both theoretical and practical aspects of the system as it relates to the goals of full-employment, price stability, and economic growth. *Prerequisite: EC 101.*

EC 204 INTRODUCTION TO MATHEMATICAL ECONOMICS (3) A study of the principal mathematical formulations used in economic analysis. Topics to be discussed include: elementary mathematical economics confined to the fields of college algebra and trigonometry; differential and integral calculus and its relation to the concepts of elasticity and production functions; and differential and difference equations and their employment in models of stable competitive equilibrium. *Prerequisites: EC 101 and EC 102. One year of college algebra or permission of instructor.*

EC 206 MANAGERIAL ECONOMICS (3) An emphasis on the application of microeconomic theory in the solution of everyday business problems faced by the firm relating to production, costs, demand, expenditures, etc. A course designed for Business Management students. *Prerequisite: EC 101 and 102.*

EC 212 ECONOMICS OF LABOR (3) An examination of the theory of wage determination and labor markets. Economic basis of collective bargaining, including evaluation of criteria used for wage determination, effects of collective bargaining issues and procedures on the economy. *Prerequisite: EC 102.*

EC 214 ECONOMICS OF INDUSTRIAL ORGANIZATION (3) An examination of modern business structure, conduct, and performance in imperfect markets. An emphasis on the development of public policy in the United States inluding federal anti-trust legislation and its judicial interpretation and regulation of business practices through the Federal Trade Commission. *Prerequisite: EC 102.*

EC 215 PUBLIC FINANCE (3) The role of government in attaining an efficient allocation of resources and an equitable distribution of income. Emphasis is placed on criteria for the evaluation and selection of public expenditure and tax programs including the problem of coordinating federal, state and local finance. Special attention is given to current policy issues. *Prerequisite: EC 101 and EC 102.*

EC 216 ECONOMIC HISTORY OF EUROPE (3) An analysis of the economic development of Europe from feudalism through the end of World War II. Special emphasis will be given to the rise and fall of the feudal economy, the transformation of agriculture, mercantilism, and the development of capitalism including the Industrial Revolution, urbanization, and economic imperialism. *Prerequisite: EC 101.*

EC 217 COMPARATIVE ECONOMIC SYSTEMS (3) A comparative economic analysis of the basic theories underlying capitalism, socialism, communism and the typical variants of these economic systems. The actual systems as they are exemplified by modern American capitalism, British and Swedish socialism and the hybrid systems of India and other developing countries will be evaluated. *Prerequisite: EC 101 and EC 102.*

EC 218 INTERNATIONAL ECONOMICS (3) An investigation into the theoretical and empirical basis of international trade and factor movements. The course deals with such basic topics as barriers to trade, the balance of payments, international monetary relations within the context of an historical perspective, present conditions, and future expectations. *Prerequisites: EC 101 and 102.*

EC 219 DEVELOPMENT OF ECONOMIC THOUGHT (3) Analyzes the content and limitations of contemporary economic thought in contrast with earlier theoretical systems. Traces the evolution of systematic economic thinking through the dual influence of internal logical development and the external social and intellectual environment. Central economic issues that are of current significance, such as price formation, distribution of wealth and income, population and international trade, etc., will be analyzed in historical perspective. *Prerequisites: EC 101 and EC 102.*

EC 299 SENIOR RESEARCH SEMINAR (3) Training in the application of economic theory and measurement to specific economic problems of local, national or international significance and in the preparation of research papers. Class discussion of student reports and assigned readings dealing with issues of economic theory and policy. Under faculty guidance, students will select a topic, design a research procedure, and complete an individual or group project. *Prerequisites: Microeconomic Theory and Macroeconomic Theory.*

EC 302 ECONOMIC HISTORY OF THE UNITED STATES (3) A study of the evolution of the American economy from colonial times to 1940. Recent analysis is utilized to evaluate the economic impact of industrialization, land policy, slavery, wars, banking, and transportation. The role of the government is carefully traced in this context. *Prerequisites: EC 101 and 102.*

EC 303 ECONOMICS OF DEVELOPMENT (3) Examination and analysis of the major theories of economic development: "surplus labor," capital accumulation, historical and cultural approaches. Investigates principal policy alternatives: foreign trade problems, "choice technique," sectoral balance, education, land reform. Discusses issues in foreign aid and gives a limited number of country studies. *Prerequisite: Any 3-credit course in Economics.*

EC 304 ECONOMICS OF URBAN DEVELOPMENT (3) An introduction to the urban area as an economic unit. Emphasis is on theoretical and institutional explanation of factors determining the level and distribution of income, growth and stability, and the location of economic activity in metropolitan areas. Topics to be discussed include land use policies, housing, urban renewal, transportation, poverty, and efficient provision of goods and services. *Prerequisite: EC 102.*

EC 350 CURRENT ECONOMIC ISSUES (3) Analysis of contemporary issues in domestic and international economic theory and policy at both macro- and micro-economic levels, including study of public vs. private sector relationships, the market structure, and the industrial base. *Prerequisites: EC 201 or 202 or permission of instructor.*

BUSINESS MANAGEMENT COURSES

MG 101 INTRODUCTION TO BUSINESS (3) An introduction to the field of Business Management. The course covers types of businesses, their organization, and the general functions of financial management, production management and marketing management. (For non-business majors only).

MG 104 PRINCIPLES OF ACCOUNTING I (3) Development of a framework of concepts underlying the preparation of corporate financial statements which are useful to investors, economists, the general public, and other interested external parties. The balance sheet and income statement as conventionally reported by American corporations are studied as to methodology for their preparation, their interpretation, and their strengths and limitations. *Prerequisites: MG 101 or 121 or equivalent.*

MG 105 PRINCIPLES OF ACCOUNTING II (3) Continuation of the emphasis in Principles of Accounting I upon corporate financial reporting to external parties. An introduction to the concepts underlying the preparation of accounting information which is useful to management in the planning and control of business operations. *Prerequisite: MG 104.*

MG 107 SOFTWARE APPLICATIONS IN MANAGEMENT (3) Examines software designed for management including spreadsheets, data-base packages, and mainframe communications. Provides practical experience as well as systems theory necessary for managerial decision-making. Fundamentals of computer literacy and logical thinking, as they relate to management, are emphasized.

MG 121 BUSINESS MANAGEMENT: A SURVEY OF ORGANIZATIONAL DEVELOPMENT AND MANAGEMENT PRINCIPLES (3) Provides a general probe into the role of management in business, exploring concepts of management used in business, various issues of Business Management structures and the organization of management. Topics to be studied include an examination of a systems approach to management, human behavior, personality conflict in organizations and techniques of creative management. The course shall touch upon several leadership development strategies, models of executive action in business policy or control, and provide a broad comprehensive over-view of current issues concerning women, minorities and social responsibility in the field of Business Management.

MG 205 FUND ACCOUNTING (3) Concerns the accounting theory applied to nonprofit entities such as municipalities, universities, hospitals, and churches. Content constitues a significant portion of the Uniform Certified Public Accountant examination. *Prerequisite: MG 104.*

MG 207 FINANCIAL MANAGEMENT (3) An analysis of the financial structure of American business with major emphasis on corporate finance. Among the topics to be considered are: promotion, government regulation of security sales, stocks, bonds, and stock market, investment banking, corporate dividend and investment policies, security analysis, working capital, corporate capital structure, government regulation of financial policies and mutual funds. Some attention is given to broad economic problems such as the influence of corporate finance on prices, investment, saving, prosperity and depression. *Prerequisite: MG 104.*

MG 210 BUSINESS DATA PROCESSING APPLICATIONS (3) Examines computer applications to business systems of purchasing and receiving, inventory control, production control, distribution and billing, accounts receivable, accounts payable, and payroll. Material covered also includes basic mathematics for computers and the operation of data processing equipment. *Prerequisite: MG 104.*

MG 220 PRODUCTION/OPERATIONS MANAGEMENT (3) Provides students with a working knowledge of manufacturing and purchasing operations. The course covers: manufacturing methods, location and layout, production planning and control, purchasing, inventory control, quality control, labor relations, and general manufacturing management. *Prerequisite: MG 104.*

MG 231 MARKETING MANAGEMENT (3) A developmental survey into the field of Marketing in business, which will study the roles of marketers in business and society as a whole. Concentration shall be placed on defining what is marketing, what does a marketing executive do, what are the various systems of marketing, and what economic factors effect marketing. In order to probe these questions, the course shall examine consumer behavior, purchase decision-making, product pricing, policy and planning, channels of distribution in business, and marketing institutions and organizations. Further dimensions of advertising, marketing research, analysis, forecasting, and marketing information flows, controls and performance shall be explored. *Prerequisites: MG 101 or MG 121.*

MG 241 BUSINESS LAW I (3) Develops an understanding of the philosophical and logical development of the law and its relationship to business through the use of text and case analysis. Explores, in-depth, substantive contract law, which forms the basis for business transactions, commencing with the initial negotiation and offer through performance of legally binding obligations and the remedies available if obligations are not performed. *Prerequisites: MG 101 or 121.*

MG 242 BUSINESS LAW II (3) Continuation and extension of the principles of Business Law I into other areas of law directly affecting modern business. Emphasis is on agency law, including employment; and property law both real and personal. Introduces forms of business organizations and commercial and financial transactions. *Prerequisite: MG 241.*

MG 250 QUANTITATIVE APPROACHES TO BUSINESS DECISIONS (3) Covers the application of quantitative techniques to business problem-solving and decision making. Subjects include linear programming, probabilities, simulations, PERT, queuing, and game theory. The application of these analytical tools to business decision problems such as: distribution, inventory control, product mix, scheduling, competitive strategy, and forecasting is covered through case analysis. Approximately 1/3 of the course is devoted to case work. *Prerequisites: MG 207, 220, 231.*

MG 301 LABOR RELATIONS (3) Examines the legal relationship between employer and employee. Uses text reading and case analysis to cover labor legislation, union organizations and practices, unfair labor practices, employment discrimination, and affirmative action programs. *Prerequisite: MG 241.*

MG 302 SMALL BUSINESS MANAGEMENT (3) A detailed study of the knowledge required and the factors involved in starting and operating a small business. Cost and money management are emphasized. Other areas covered include: product selection, location and timing, pricing and other marketing techniques, purchasing and inventory control, and the personal factors contributing to success. *Prerequisites: MG 231, 241.*

MG 303 OFFICE MANAGEMENT AND PROCEDURES (3) Examines the administrative procedures necessary to control a business. These include office personnel, equipment, procedures, forms design and control, and business record keeping and reporting. *Prerequisites: MG 121.*

MG 304 MANAGERIAL ACCOUNTING (3) Designed to be used by students with a basic financial accounting background. Emphasis is on uses of accounting data internally by managers in setting plans and objectives in controlling operations. Topics covered will be management decision models, cost behavior patterns, profit planning and control. *Prerequisite: MG 105.*

MG 306 DISTRIBUTION MANAGEMENT (3) A vital part of the marketing world today is efficient physical distribution. Here the physical flow of products from manufacturers to retail stores is studied in depth. Included are the following areas: transportation, warehousing, inventory control, packaging, and materials handling. *Prerequisite: MG 231.*

MG 307 MARKETING RESEARCH TECHNIQUES (3) Reviews the specialized techniques for conducting marketing research and how they contribute to marketing strategy. Material covered includes quantitative and qualitative research, simulation, forecasting, survey preparation, and secondary source analysis. *Prerequisite: MG 231.*

MG 308 ORGANIZATIONAL DEVELOPMENT & BEHAVIOR (3) Examines the foundations for understanding individual and group behavior and relates these points to the problems faced by managers in organizations. Emphasis is on topics of study relevant to developing managerial effectiveness in interrelationships with other organizational members. Course attempts to develop an understanding of the relationship between individual and organization and to identify management skills that can contribute to effective performance. *Prerequisites: MG 231, 241.*

MG 309 SALES AND SALES MANAGEMENT (3) A course in effective salesmanship and how to set up and control a field sales organization. Course emphasizes the role of personal selling in the marketing mix and covers all basic sales management issues. *Prerequisite: MG 231.*

MG 310 FEDERAL INCOME TAXATION (3) A first course in Federal Taxation which provides an overview of past and present Internal Revenue Codes. Emphasis is on personal and business income tax procedures and preparation. Exclusions, deductions, and income from proprietorships, partnerships, rental units, trusts, and estates, dividends, and interest are included. *Prerequisite: MG 105.*

MG 311 AUDITING (3) Covers the principles of auditing, using accounting principles as criteria. Auditing procedures and analysis of supporting documentation materials is emphasized. A practice audit and case studies are required. *Prerequisite: MG 105.*

MG 312 INVESTMENTS (3) A study of various investment securities for analysis and valuation. Included are corporation, public utility, banking, and investment company securities. *Prerequisite: MG 207.*

MG 313 COLLECTIVE BARGAINING (3) Combines the historical, behavioral, and legal elements covering the process of negotiating contractual conditions of employment. Current labor agreements are studied and distinctions between public and private sectors are identified. *Prerequisite: MG 241.*

MG 314 HUMAN RESOURCE MANAGEMENT (3) Covers the process of manpower planning and utilization in organizations. Personnel forecasting, employment, training and development, placement, motivation, wage and salary administration, employee benefits, and performance evaluation are covered. Special emphasis is given to problems arising between manager and subordinates, the professional in human services, minority groups, the hard-to-employ worker, and the impact of public policy. *Prerequisite: MG 241.*

MG 315 INTERMEDIATE ACCOUNTING I (3) Intermediate Accounting I advances the depth of accounting training that was pursued in the Principles course. Further study of financial reporting and of recent developments in valuation and reporting practices will be made. An appreciation of GAAP and SEC developments will be required. *Prerequisite: MG 105.*

MG 316 INTERMEDIATE ACCOUNTING II (3) A continuation of the professional theory and problem solving in Accountancy developed in MG 315, with emphasis on research. *Prerequisite: MG 315.*

MG 317 COST ACCOUNTING (3) Basic cost accounting methods for data collection, processing and reporting. Emphasis is on direct, job, process and standard cost systems. Estimating and profit calculation are also covered. *Prerequisite: MG 105.*

MG 318 ADVANCED MANAGERIAL FINANCE (3) A study of the financial operation and control of a corporation. Financial policies, practices, and organization are included. *Prerequisite: MG 207.*

MG 319 INVESTMENT PORTFOLIO ANALYSIS (3) Advanced analysis of market behavior involving detailed discussion of modern portfolio theory. The modern portfolio theory approach is contrasted with other evaluative techniques. *Prerequisite: MG 312.*

MG 321 MANAGEMENT INFORMATION SYSTEMS (3) Provides the background and perspective necessary to understand, utilize and interact with integrated, management information systems. Various techniques from industrial engineering, computerized data processing, and operations research are covered. These techniques are then applied to the planning, design and implementation of information systems. Course involves case work. *Prerequisites: MG 207, 210, 231, 241.*

MG 325 BUSINESS POLICY AND STRATEGY (3) Emphasizes management planning and control techniques in solving business problems and in determining strategy for sales and profit growth. An integrated case study approach will be used. The course will illustrate the many factors that influence complex business decisions. FOR SENIORS ONLY. *Prerequisites: MG 207, 231, 241.*

MG 326 INSURANCE AND RISK MANAGEMENT (3) Provides the student with an in-depth understanding of all phases of insurance and risk management. The topics to be studied are basic principles, the nature and operation of insurance business, and the nature of risk and risk management. Included in these topics are property insurance; casualty insurance; life, accident, and health insurance; and group and social insurance. *Prerequisite: MG 207.*

MG 327 SMALL BUSINESS INSTITUTE (3) Small Business Institute is a cooperative effort between the Small Business Administration and W.S.C.'s Business Management Department. The course will supplement the academic training of business students with "real-world" problems from the small business sector. Student teams from the Business Management Program will furnish in-depth management assistance to small businesses. Areas of assistance include: Accounting & record keeping, market research, advertising & sales promotion, inventory control, etc. *Prerequisite: junior or senior status, & permission of department.*

MG 328 ADVERTISING TECHNIQUES AND STRATEGIES (3) Vital to the world of modern business is an understanding of the role of advertising. This course provides a study of the techniques and practices of advertising today. Strategies and procedures for campaign design and execution will be examined. Students will take an advertising idea through the various stages of planning, visualizing and writing advertising copy. *Prerequisite: MG 231.*

MG 329 PRINCIPLES OF MODERN BANK MANAGEMENT (3) This course teaches the theory and practice of modern bank management, which includes the following: portfolios and functions, branch systems, holding companies, multi-national banking systems, asset and liability management in commercial banks, trust services and strategies. It also includes a review of other financial intermediaries. *Prerequisite: MG 207.*

MG 330 CONTEMPORARY PROFESSIONAL ACCOUNTING PROBLEMS (3) Examines professional accountancy problems, design of format solution sets, and guides to underlining theory. This course supplies an integrated approach to the problems and theory sections of the CPA and CMA exams. *Prerequisite: MG 316.*

MG 331 ADVANCED ACCOUNTING (3) An intensive course that specializes in areas of accounting including: partnerships and joint ventures, branches, consolidated statements, segment reporting, interim statements, multi-national companies, bankruptcy and reorganization, installments and consignments, fund accounting, and estates and trusts. *Prerequisite: MG 316.*

MG 332 THE MONEY MARKET: THEORY AND PRACTICE (3) The course focuses on short-term, liquid investments. The study of domestic and international instruments leads to analysis of the yield curve, the market makers, arbitrage and the role of the central bank in determining the price and supply of money. *Prerequisite: MG 207.*

MG 333 LAW AND BUSINESS: CURRENT ISSUES (3) An upper level course, the objective will be to develop an understanding of the impact of the law on the complex climate in which the contemporary business entity operates. Students will examine the legal environment of managerial behavior in order to understand the philosophical, political, historical, social and ethical bases of American business. Current problems, including antitrust, unfair competition, regulation and deregulation, marketing, consumerism, corporate social responsibility, and business ethics, will be explored. *Prerequisite: MG 241.*

MG 334 SEMINAR IN NEW VENTURE IN BUSINESS (3) The objective is to understand the pervasiveness of conceptualizing, investigating, planning and establishing a new venture. Students will explore the interrelationships among the complex elements necessary to make an innovative idea into a new, profit making venture. The principles studied will apply equally to smal, entrepreneurial businesses and new product or process development within a large organization. Students will study the elements that lead to success; then, through simulation and participation, will create a prototype business plan analyzing and integrating the functional, organizational and financial aspects of the venture. *Prerequisites: MG 231, 241, 207, and permission of department.*

MG 335 MARKETING COMMUNICATIONS (3) Exposes students to all aspects of marketing communications and promotion, including advertising, personal selling, sales promotion, public relations, publicity, and word of mouth. It integrates communication theory with pragmatic aspects of the organizational/environmental interface. The course also covers non business promotion, services promotion, promotion management, consumer correspondence, and consumer education. *Prerequisite: MG 231.*

MG 336 MANAGEMENT OF RETAILING ENTERPRISES (3) Retailing concepts, structure, and competition are studied and evaluated. Attention is given to techniques and procedures of purchasing goods for resale. The necessity of keeping merchandise assortments adjusted to constantly changing consumer demands is analyzed. Retail organizational trends and management, market analysis, store location, sales forecasting, and retail advertising will be examined. *Prerequisite: MG 231.*

MG 337 CONSUMER BEHAVIOR (3) By gaining a better understanding of the factors that affect consumer behavior, marketers are in a better position to predict how consumers will respond to their marketing strategies. Consumer Behavior draws on the Social Sciences in addition to the quantitative charteristics of the market such as: population patterns, income distribution, living standards, and occupational changes.

MG 338 INTERNATIONAL BUSINESS (3) Provides an opportunity to bring the tools and information gained in previous courses to the task of solving managerial problems in international and foreign environments. Focuses on an analysis of market opportunities and methods of entry in foreign business areas and on related business problems. *Prerequisite: senior status business major or permission of instructor.*

MG 350 SPECIAL TOPICS (IN BUSINESS MANAGEMENT) (3) Examines and analyzes contemporary topics in Business Management. Educates the student in the application of strategy and integrates fundamental problem solving techniques into contemporary situations. Focuses on current business issues, yet takes a traditional perspective. *Prerequisite: MG 241 and 250.*

MG 398 BUSINESS INTERNSHIP (3-15) Full time business student/ must be a second semester junior or senior & have permission of department.

MG 399 INDEPENDENT STUDY (junior/senior status & permission of department)

EDUCATION

Chair, Bruce J. Gordon

Wanda D. Cook, Bernard J. Fleury, Robert O. Guilbault, Louise B. Haas, Martin R. Henley, Barbra A. Holland, Donald L. Landry, Lawrence W. Latour, Alex S. Mackertich, Dewey McGowen, Linda W. Nober, Joseph L. Pappalardo, Robert Saisi, G. Frank Sammis

Since its founding in 1836, Westfield State College has been a leader in teacher preparation.

Today, the department of Education holds that to achieve professional status, teachers must demonstrate mastery in a number of interrelated areas. Therefore, the programs offered to education majors represent an integration of the various courses and course sequence offered by a number of the college's academic departments.

All existing Westfield State College teacher education programs at the undergraduate level in elementary, secondary, special and occupational education have been accredited by the New England Association of Schools and Colleges (1980-1990) and by the National Council for the Accreditation of Teacher Education (1977-1987). Interstate Certification Compact approval from the Massachusetts Department of Education was awarded for elementary, secondary, and special education programs (1983-1988).

Teacher education programs at the elementary level include early childhood education and elementary education. At the secondary level the approved programs include English, history, mathematics, general science, chemistry, biology, and business management. In special education the approved programs include specialization to work with young children with special needs, moderate special needs, and/or severe special needs.

Special admissions and retention criteria for Teacher Certification Programs are maintained by the Department of Education. In addition, a grade point average of 2.3 is required for a student to be recommended to enroll in practicum.

A complete listing of teacher preparation programs sponsored or co-sponsored by the department of education includes:

Certificate No.	*Title*	*Department*
3	Early Childhood Teacher	Education
4	Elementary Teacher	Education
11	Teacher of English, 5-9, 9-12	English/Education
12	Teacher of History, 9-12	History/Education
15	Teacher of Mathematics, 5-9, 9-12	Math/Education
19	Teacher of General Sciences, 5-9, 9-12	Physical Science/Education
16	Teacher of Chemistry	Physical Science/Education
18	Teacher of Biology, 9-12	Biology/Education
35	Teacher of Business Management, 5-12	Econ.-Bus./Education
02S	Teacher of Young Children w. Special Needs, 3-7 years	Education
52L	Teacher of Children w. Severe Special Needs, N-12	Education
53J,H	Teacher of Children w. Moderate Special Nees, N-9, 5-12	Education

ELEMENTARY EDUCATION

Elementary Education is committed to excellence in the preparation of teachers. Students enrolled in a Bachelor of Science in Education program may declare either of the elementary programs as their major field. The two certification programs are Early Childhood (Grades K-3) and Elementary Teachers (Grades 1-6).

Generally, a student has two years in which to acquire a broad base in the liberal arts areas. During this time a student takes introductory courses in Education, and becomes familiar with practical work in the classroom through a teacher-aiding experience which helps confirm his/her desire to enter the teaching profession. During the last two years of college, students can pursue their professional sequence, complete their area of concentration, when appropriate, and expand their opportunities for a liberal education. There is a gradual involvement in a series of theoretical, simulated and actual experiences prepa-

ratory to the culminating activity — a full semester student teaching practica. Undergraduates completing all the requirements of either program are recommended by the Department of Education to the certifying officials of the Commonwealth of Massachusetts.

Program Requirements — Early Childhood (Grades K-3)

Introduction to Teaching (1)
Education of the Exceptional Child (3)
Tests and Measurements — Diagnosis (3)
Principles of Teaching I (2)
Field Experience I (1)
Principles of Teaching II (2)
Field Experience II (1)
Philosophy of Education (3)
Interpersonal Relations (3)
Seminar Recent Developments: Computers in Education (3)
Child Psychology (3)
Children's Literature (3)
Early Childhood Curriculum (3)
Organizational Settings in Early Childhood (3)
Seminar: Early Intervention (3)
Reading: K-6 (3)
Methods and Materials in Language Arts (3)
Health Education in the Elementary School (3)
Physical Education in Elementary Schools (3)
Practicum: Early Childhood (K-3) (12)

Program Requirements — Elementary Teachers (Grades 1-6)

Introduction to Teaching (1)
Education of the Exceptional Child (3)
Tests and Measurements — Diagnosis (3)
Child Psychology (3)
Principles of Teaching I (2)
Field Experience I (1)
Principles of Teaching II (2)
Field Experience II (1)
Seminar Recent Developments: Computers in Education (3)
Reading: Grades K-6 (3)
Methods and Materials in Language Arts (3)
Elementary School Curriculum Design (3)
Philosophy of Education (3)
Practicum: Elementary School 1-6 (12)

Students may select both a degree and certification program. In addition, an 18 hour minor is required for all students in the elementary education program. This minor must be in an area which is regarded as an elementary school discipline. These minors may include Reading, Social Studies, Math, Science, or Communication.

SPECIAL EDUCATION

In 1972, through Chapter 766, the Massachusetts legislature mandated a basic change in the provision of services to children with special needs. The law required that effective September 1, 1974, children with special needs were to be served non-categorically and within the least restrictive environment possible. P.L. 94-142, The Education of All Handicapped Children's Act was the federal law passed in 1975 reinforcing the previous changes and guaranteeing full education for the handicapped and due process.

The regulations designed to implement these laws clearly indicate the need for special education teachers to provide services to children with a wide range of needs in a continuum of educational settings. Therefore, the Special Education Programs at Westfield State College reflect this mandate by providing options for experiences and training which demonstrate the changing roles of personnel and administrative arrangement. Three programs are available to students enrolled in this area. They are:

1. Teacher of Children with Moderate Special Needs
2. Teacher of Children with Severe Special Needs
3. Teacher of Young Children with Special Needs

The first option (Moderate Special Needs) requires a prior classroom certificate (early childhood, elementary, middle or secondary subject areas or Special Subject such as Music, Art or Physical Education). Students enrolled in this program are dual majors, i.e. Moderate Special Needs plus a basic area as previously described.

The other two programs (Severe Special Needs, Young Children with Special Needs) are separate certificate programs and students in either program may be solely designated as Special Education Majors.

In general, the Special Educator is trained in the educational, social, emotional and vocational influences of developmental deviations; observation, identification, assessment and programming processes; adaptation and development of curriculum maerials; language acquisition; analysis of behavior; the development and implementation of individual educational plans; the knowledge of legislation; and comprehensive support services for special needs populations.

Program Requirements — Moderate Special Needs (N-9, 5-12)*

Introduction to Teaching (1)
Education of the Exceptional Child (3)
Child Psychology (3)*
Developmental Disabilities (3)
Students with Specific Learning Problems (3)
Students with Special Behavioral/Emotional Needs (3)
Speech and Language Problems (3)
Comprehensive Support Services in Special Education (3)
Identification, Assessment, Placement and Programming (Moderate) (4)*
Clinical Experience in Special Education (Moderate) (3)*
Practicum: Moderate Special Needs (6)*

*At appropriate level

Program Requirements — Severe Special Needs

Introduction to Teaching (1)
Education of the Exceptional Child (3)
Child Psychology (3)
Developmental Disabilities (3)
Students with Special Behavior/Emotional Needs (3)
Speech and Language Problems of Children with Special Needs (3)
Comprehensive Support Services (3)
Seminar Recent Developments: Computers in Education (3)
Education and Training of the Substantially Handicapped Student (3)
Developing and Administering Community Based Resources (3)
Identification, Assessment, Programming and Placement (Severe Special Needs) (4)
Clinical Experiences in Special Education (Severe) (3)
Practicum: Severe Special Needs (12)

Program Requirements — Teacher of Young Children with Special Needs

Introduction to Teaching (1)
Education of the Exceptional Child (3)
Child Psychology (3)
Philosophy of Education (3)
Developmental Disabilities (3)
Students with Special Behavioral/Emotional Needs (3)
Speech and Language Problems in the Special Needs Child ()
Comprehensive Support Services in Special Education (3)
Seminar Recent Developments: Computers in Education (3)
Early Childhood Settings (3)
Seminar: Early Intervention for Young Children with Special Needs (3)
Identification, Assessment, Placement and Programming (Young Children) (4)
Clinical Experience in Special Education (Young Children) (3)
Practicum: Young Children with Special Needs (12)

SECONDARY EDUCATION

Secondary Education provides students with basic tools for teaching in select academic disciplines at the middle school, junior and senior high schools. Methods and techniques of teaching the individual

academic subjects are emphasized in order to help the student become skilled in the communication of the principles and concepts basic to the subject. The program is structured in a way that enables the student to gain exposure to actual classroom situations early in his or her college studies, usually not later than the sophomore year. Thus the student is better able to make judgements relative to a future career in teaching. With emphasis on content in the academic discipline as a base, and with intense preparation in simulated and actual teaching situations the student experiences and demonstrates competencies required for successful teaching.

A student may elect to prepare for teaching in any one (or a combination of) the following areas: Art (K-12), Biology (9-12), Business Management (5-12), Chemistry (9-12), English (5-9, 9-12), General Sciences (5-9, 9-12), History (9-12), Mathematics (5-9, 9-12), Music (K-12), Physical Education (5-9, 9-12).

In addition to selecting a certifiable major, students follow a program that is termed the professional sequence in Education. Students who complete all requirements are endorsed by the Westfield State College Department of Education for teacher certification.

Secondary Education also offers a Community Service Placement. This is a six credit course which provides field work for students who wish to augment their teacher preparation sequence with additional clinical experience and for students in any major who wish to enroll in this course as an elective.

Freshman students who plan to follow the professional sequence in Secondary Education should make an appointment to see the Chair, Department of Education, during their beginning semesters of college studies.

Program Requirements — Middle School (5-9) Subject Specialist

Course Requirements
Structures and Functions (3)
Education Exceptional Children (3)
Interpersonal Relations (3)
Middle School (3)
Teaching and Learning I (3)
Teaching and Learning II (3)
Seminar Recent Developments: Computers in Education (3)
Practicum: Middle School (12)

Program Requirements — Secondary School Level (9-12)

Course Requirements
Structures and Functions (3)
Education Exceptional Children (3)
Interpersonal Relations (3)
Teaching and Learning I (3)
Teaching and Learning II (3)
Seminar Recent Developments: Computers in Education (3)
Practicum: Secondary School (12)

OCCUPATIONAL EDUCATION

In cooperation with the Division of Occupational Education of the State Department of Education, Westfield State College offers a degree program for vocational teachers. This is a Bachelor of Science in Education (Vocational) for teachers of trades in the vocational schools of Massachusetts. All of the students in this program are employed either in their trade area, or in a vocational technical school or comprehensive high school.

Since the students in this program are employed during the day, the entire program is offered on a part-time basis. It should be noted that a degree is not a requirement in the Commonwealth of Massachusetts for teaching a trade in a vocational school.

Program Requirements — Occupational Education

Teaching Methods in Vocational Education (6)
Principles and Practices of Occupational Guidance (3)
Educational Psychology Applied to Occupational Education (3)
Occupational and Training Information (3)
Organization and Administration of Occupational Guidance Vocational School (3)
Supervision and Administration of the Vocational School (3)
Appraisal and Evaluation Techniques in Occupational Education (3)

Labor Laws Relating to Occupational Education (3)
Curriculum Development in Occupational Education (3)
Interpersonal Relations and Conference Leadership (3)
Philosophy of Occupational Education (3)
Trade and Teaching Experience: 10-20 credits which may be granted by the State of Massachusetts to persons working toward State approval for vocational teaching.

If a student has four years teaching experience in a state-aided day vocational school and a minimum of eighty credits toward the degree, he or she may apply for Trade Experience and Professional Improvement (i.e. workshops, conferences, institutes, etc.) Credit as part of the elective core.

JUNIPER PARK SCHOOL

Principal Mr. Thomas McManus

This elementary school is jointly administered by Westfield State College and the City of Westfield Public Schools under an agreement contract entered into January 1, 1942. The school is located adjacent to the college campus. Students in teacher education programs have the opportunity to observe team teaching, differentiated staffing, demonstration lessons, and innovative curricula components taught by master teachers. Juniper Park School affords pre-service and in-service students opportunities to interact with pupils in grades K-5.

The school staff represents a full range of education personnel including specialists and special educators. This staffing pattern allows Westfield State College students in various teacher education programs to access the facility, i.e. music, art, physical education. Westfield State College programs leading to certificates in early childhood education, elementary education, special education, art, music, physical education, and others rely upon the staff and physical facilities of the school for pre-practicum and practicum placements for students in training.

COURSES

ED 102 INTRODUCTION TO TEACHING (1) Assignment to various educational settings provides prospective teachers with an opportunity to observe and interact with individuals and small groups. Students visit with cooperating practitioners for at least two hours weekly. As a result, students gain understanding about their personal and career goals relative to the teaching field.

ED 103 INTRODUCTION TO TEACHING II (1) Additional field experience (as described above) available for those undergraduate students who are still uncertain about career goals, as well as those studying in other disciplines.

ED 105 IMPROVEMENT OF READING I (3) The course is expressly designed to provide a customized approach to help the student to improve in his/her reading skills. Major areas include the improvement of the student's comprehension, the development of the student's study skills habits and techniques. Scheduling for this course will be highly individualized and flexible, with classes arranged to best suit the student's needs.

ED 106 IMPROVEMENT OF READING II (3) Sequel to ED 105. Some students may take a second semester of the above.

ED 141 EDUCATIONAL PSYCHOLOGY APPLIED TO OCCUPATIONAL EDUCATION (3) Organized around major discussion topics with particular reference to their application in the vocational schools. Among the topics considered are: motivation, readiness, climate for learning, level of aspiration, and the various types of learning.

ED 155 STRUCTURE AND FUNCTIONS OF THE SECONDARY SCHOOL (3) Discussion of various aspects of the secondary school program including co-curricular activities, scheduling, fiscal procedures, legal responsibilities, public relations, systematic environment, and other areas of relationship and interaction. Emphasis will be placed upon the interdependence of the components of the modern secondary school and the role functions of the secondary school. On-site visits to a selected secondary school, research projects (group and individual), and evening panel discussions with members of various school systems will be part of the course requirements.

ED 170 EDUCATION OF EXCEPTIONAL CHILDREN (3) An introductory course. It is intended as a survey course for both prospective teachers and individuals who will work with a wide variety of children with special needs. It is also intended to serve as an introduction to the special education field.

ED 201 TESTS AND MEASUREMENTS — DIAGNOSIS (3) Underlying mathematical, psychological, and social principles pertaining to evaluation will be examined. Students will apply these principles to standardized and teacher-made tests, both individual and group, verbal and non-verbal, including variations such as criterion, competency, and performance-bases testing. Diagnosis of particular children with serious learning problems in the area of basic skills; perceptual-motor; speech and language; writing; and the affective domain, will be studied.

ED 202 COMMUNICATION THROUGH READING (1-3) Expressly designed to provide a customized approach to help the student to learn the various techniques of comprehension of literal, interpretive, and critical levels; identify organizational patterns, develop vocabulary; and adjust the rate of reading in a wide variety of materials. The course is designed to provide opportunities for the individual to contract in the above areas, earning from one to three credits. Scheduling for this course will be highly individualized and flexible, with classes arranged to best suit the student's needs.

ED 205 ADULT LITERACY: PROBLEMS AND ISSUES (3) Describes the problems, accomplishments and failures of adult literacy education in the United States. The changing social philosophy and its effect on legislation programs, methods, and materials of the past, present, and future. Local efforts and needs in adult basic education will be investigated.

ED 210 FUNDAMENTALS OF VOCATIONAL EDUCATION (3) Presents the history and philosophy of vocational education, present state of federal vocational education, Chapter 74, Child Labor Laws, Chapter 22 of Title IX, Chapter 766, State Vocational Council, the National Center for Research in Vocational Education.

ED 211 TEACHING METHODS IN VOCATIONAL EDUCATION (6) Covers theories, techniques of instruction, use of audio visual equipment, preparing lesson plans for class or unit, and evaluation of student learning.

ED 212 MANAGEMENT OF THE VOCATIONAL EDUCATION ENVIRONMENT (3) Shop, academic, related classroom and cooperative placement sites; safety, priority population, developmental psychology with focus on adolescent psychology, learning styles, and disciplines.

ED 240 OCCUPATIONAL AND TRAINING INFORMATION (3) The study of the history of occupations, work classification, job families and job descriptions, current occupational information and the Dictionary of Occupational Titles.

ED 255 STUDENT EVALUATION IN THE SECONDARY SCHOOL (3) Appraisal of the development and significance of educational-measurements as they relate to the secondary school student. Emphasis on uses and limitations of classroom tests; analysis, interpretation and utilization of test results.

ED 256 CONTEMPORARY ISSUES IN SECONDARY EDUCATION (3) Analysis of major social forces affecting secondary education, including contemporary social, cultural, economic, and political issues. Exploration of various underlying educational policies.

ED 303 READING: GRADES K-6 (3) Explores the philosophy and psychology of teaching reading at the K-6 level. It provides opportunities for planning, preparing and teaching different aspects of a reading lesson. Areas covered include readiness, word recognition, word analysis skills, word meaning skills, reading in content areas, comprehensive skills, basal reading and enrichment. Emphasis is placed on diagnostic teaching and tailoring instruction to the individual. Reading programs currently used in the public school systems are analyzed and evaluated.

ED 304 READING AND CREATIVE WRITING FOR THE CLASSROOM TEACHER (3) Designed both to aid the teacher in his/her awareness of creative expression and to provide a better understanding of basic objectives, techniques and means of fostering creativity within the actual classroom. A wide variety of creative writing experiences will be explored, identified, and applied. Creating classroom climate conducive to creativity and establishing learning centers will also be major goals of this course.

ED 305 METHODS AND MATERIALS IN LANGUAGE ARTS K-6 (3) Concerned with those developmental activities that lead to skills and competencies in oral and written communication. Project and activities focus on the development of skills in speaking, listening, spelling, handwriting, grammar and punctuation. Projects also focus on the aesthetic activities which include poetry, creative dramatics, creative writing and choral verse. Lesson planning in the above activities and teaching minilessons are important practical features of this course.

ED 306 CURRICULUM DESIGN AND EVALUATION IN THE ELEMENTARY SCHOOL (3) A developmental view of the progress and conceptual structure of modern elementary school curriculum design and implementation. Consideration will be given to curriculum organization and the forces affecting it.

ED 307 PHILOSOPHY OF EDUCATION (3) Designed to stimulate creative and critical thought concerning the nature and value of education. It examines the kinds of political, moral, epistomological and theological principles which have been used to support various definitions of education, and critically considers implementation based on these definitions.

ED 308 EARLY CHILDHOOD CURRICULUM (3) The problems and principles of early childhood education are identified for students through lectures supported by observations, demonstrations, and assigned aide work in selected classroom settings. Use of developmental and manipulative materials, music and art experiences, work and play periods and the development of language skills of the young child will be emphasized in the curriculum content. Reading and number readiness practices will also be studied and evaluated. Units of work in science and social studies related to the world of the five-year old will be prepared as resource units to use as models for the teacher.

ED 309 CHILDREN'S LITERATURE (3) Designed to provide teachers with a background of the major objectives and purposes for children's literature in today's classroom. Major emphasis will be given to a review of various types of children's literature, ways to share literature effectively with children, the use of media to encourage more reading, and to the establishment of library centers within the classroom setting. Areas of specialization such as award-winning books, key illustrators, poetry, and traditional literature will also be included in this course. Actual experiences in storytelling will also be provided.

ED 310 SEMINAR: TEACHING DESIGNS IN EARLY CHILDHOOD (3) The seminar is designed to examine considerations in structuring learning experiences and environments for young children. Included will be research studies of Piaget, Skinner, and Maslow and their influence on the teaching designs of curriculum to meet the needs of young children, including those at risk. Specific attention will be given to reviewing and studying early childhood demonstration programs that have been designed to meet the needs of the 9 mos.-3 year old, as well as 4-7 year old children with a variety of handicapping conditions.

ED 311 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3) Requires students to examine actively the basic principles underlying Social Studies. It requires that students become aware of unifying concepts and generalizations related to the realities of how people live and interact. Examination of traditional and current Social Studies projects is a matter of concern. Concurrently, production of materials and use of procedures promoting apt combinations of cognitive affective and psychomotor behaviors are expected.

ED 312 OUTDOOR EDUCATION: SEMINAR (3) The seminar will focus attention of local, state, federal authorities and their responsibilities for developing lands for public use. Participants will be expected to attend outdoor skill experiences and be able to relate them to classroom activities and school curriculum. In addition, students will be expected to examine areas of interest and prepare written materials for use in a classroom or outdoor setting. Resource consultants will be invited to express their views about environmental issues and concerns.

ED 314 SUPERVISED INTERNSHIP (3) Supervised by a master teacher and monitored by a college instructor. Demonstration of the application of pedagogical skills. *Prerequisite: Completion of the four pre-internship vocational instructor approval courses.*

ED 315 COMPARATIVE EDUCATION (3) Offers descriptive and analytical examination of differing educational systems — both of developed and developing nations — as existing in contemporary world society. The objective is for the student to ultimately achieve deeper understanding of the American education system and the relationship of the system to its culture and tradition.

ED 317 ANALYSIS AND CORRECTION OF READING DISABILITIES (3) Designed to instruct students in the K-6 sequence in the procedures, techniques, and materials used in diagnosing, prescribing, and remediating individual reading disabilities. Instruction in theoretical background is applied in a practicum with disabled readers.

ED 318 READING IN THE CONTENT AREAS (3) Approaches reading as a tool in the content areas of the curricula. All of the major subject matter areas will be explored. The general reading abilities involved in these areas as well as the specialized reading needs will be examined. The objectives, techniques, procedures, and material will be identified and utilized. Designed for teachers in the intermediate and secondary levels.

ED 319 PRINCIPLES OF TEACHING I (2) Designed to give students experience in writing objectives, lesson plans and questioning in the three domains cognitive, affective, psychomotor. In addition, students will learn different modes of teaching and what constitutes appropriate practices and sequence of instruction. Students will learn about and how to use various forms of audio visual media.

ED 320 PRINCIPLES OF TEACHING II (2) Long range planning through units and learning centers will be the focus of learning. Through these, students will learn about recent classroom developments and the roles of grouping discipline and classroom management. Health and physical education as they relate to the elementary school population will be studied.

ED 322 PROGRAM DESIGN FOR THE TALENTED AND GIFTED (3) Examination of previously documented studies of gifted children. Exploration of needs of students, dimensions of curricula development and evaluation of the gifted.

ED 323 FIELD EXPERIENCE I (1) This is a prepracticum to be taken concurrently with Principles of Teaching I. Students will apply the learnings and principles in a field setting. Students will use these opportunities to establish their competencies required for certification.

ED 324 FIELD EXPERIENCE II (1) This is a prepracticum to be taken concurrently with Principles of Teaching II. Students will apply the learnings and principles learned in a field experience setting. Students wiil use this opportunity to establish their competencies required for certification.

ED 326 LISTENING AS AN ASPECT OF READING (3) The purpose of this course is to acquaint the teacher with listening as a vital area of the total language arts program. Listening as one of the major tools in learning and communication is explored. The course concerns itself with the nature of listening; listening in the total curriculim; and creating an environment for effective listening development. The course will also provide opportunity to develop resource materials such as tapes and games which would be applicable to practical teaching situations.

ED 328 LITERATURE AT THE SECONDARY LEVEL (3) A survey of literature for grades 7 through 12. The contents of the course will include a brief history of the development of young adult literature, analysis of reading interest, evaluation of authors and publishers, guidance in student book selection, book talks and book lists. The course will require intensive reading and an analysis of literature for these grades.

ED 330 ORACY: CHILDREN'S SPEAKING AND LISTENING (3) This course is designed to promote familiarity with and ease in fostering creativity and language development. Attention will be given to creating the climate for language growth, language and body expression, creative play and oral expression, beginning oral language activities, speech skills and teaching oral expression in natural situations. This process is thought to be a basis for children's subsequent learning to read.

ED 331 CREATIVE DRAMATICS IN A READING INSTRUCTIONAL PROGRAM (3) Deals with activities related to creative dramatics which can be integrated into literature and reading programs. Competence in using drama and in actual performance through assignments and projects that focus on creative dramatics, improvisations, role-playing, poetry, choral verse, and the adaptation of basal reader stories into play form.

ED 332 PSYCHOLOGY OF READING INSTRUCTION (3) Nature of reading process; factors of learning and development related to reading achievement; psychological foundations of methods and materials of reading instruction; nature and treatment of reading disability.

ED 333 READING CLINIC: A FIELD EXPERIENCE (3) A practicum designed to give each student an in-depth clinical experience in diagnosing, prescribing, and remediating reading disabilities. Course participants will be required to define and manage a remedial program to ameliorate disabilities discovered through diagnostic procedures.

ED 334 WORD ANALYSIS SKILLS IN READING (3) Prospective reading teachers will acquire the skills of phonetic and structural analysis of words in order to teach independent word attack skills in reading. Designed to give each student experience in reading requirements and skills in teaching reading.

ED 335 INDIVIDUALIZED INSTRUCTION IN READING (3) Students study and develop techniques for implementing an individualized program in reading for the elementary grades. Included are methods of diagnosing and assessing levels of competency of children, procedures for working in an individualized program and methods of evaluating progress and keeping records. This course examines the values of various approaches to individualized instruction such as programming, performance contracting and media oriented learning centers.

ED 336 PRACTICUM EARLY CHILDHOOD K-3 (6) A minimum of 150 clock hours of supervised student teaching experience in grades K-3. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 337 PRACTICUM EARLY CHILDHOOD K-3 (6) A minimum of 150 clock hours of supervised student teaching experience in grades K-3. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 338 PRACTICUM: ELEMENTARY (1-6) (6) A minimum of 150 clock hours of supervised student teaching experience in grades 1-6. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 339 PRACTICUM: ELEMENTARY (1-6) (6) A minimum of 150 clock hours of supervised student teaching experience in grdes 1-6. Guidelines for evaluation are identified in the Westfield State College Student Teaching Handbook.

ED 341 PRINCIPLES OF OCCUPATIONAL EDUCATION (3) Areas to be discussed include methods of teaching, behavioral objectives, development of instructional competencies, unit plans and task analysis. Also covered are techniques of teaching vocational skills in private trade schools, apprentice courses, trade extension courses and adult education programs.

ED 342 SUPERVISION AND ADMINISTRATION OF VOCATIONAL SCHOOLS (3) Discussion of various aspects of the vocational school program including co-curricular activities, scheduling, fiscal procedures, legal responsibilities, public relations, systematic environment, and other areas of relationships and interaction. Emphasis will be placed upon the interdependence of the component parts of modern vocational schools. On-site visits to selected occupational schools, research projects (group and individual), and evening discussion panels with members representing various parts of a school system will be part of the course requirements.

ED 343 APPRAISAL AND EVALUATION TECHNIQUES IN OCCUPATIONAL EDUCATION (3) Appraisal of the development and significance of educational measurements as they relate to the secondary school student. Emphasis on uses and limitations of standardized tests; construction, validation and limitations of classroom tests; analysis, interpretation, and utilization of test results.

ED 344 CURRICULUM DEVELOPMENT IN OCCUPATIONAL EDUCATION (3) Preparing vaild job-related curriculum content to include cognitive, psychomotor and affective skills as well as techniques and resources for implementing a curriculum using competency based vocational education materials.

ED 344 CURRICULUM DEVELOPMENT IN OCCUPATIONAL EDUCATION II (3) Applications of competency based curriculum development principles in specific vocational areas. Curriculum development is on the competency based format and meets the standards of the Division of Occupational Education. Developed curriculum materials are suitable for implementation in the vocational technical high schools of Massachusetts. *Prerequisite: ED 344.*

ED 345 LABOR LAWS RELATING TO OCCUPATIONAL EDUCATION (3) Designed to augment the participants' understanding of the legal environment affecting students. Emphasis will be on laws affecting all teachers as well as on particular aspects of law (Torts, Negligence, National Apprenticeship Rules, Chapter 707, State Legislation, etc.) that relate especially to the participants.

ED 346 PHILOSOPHY OF OCCUPATIONAL EDUCATION (3) This study stimulates creative and critical thought concerning the nature and value of education. The course is designed to examine the kinds of political, moral, epistemological, and theological principles which have been used to support various definitions of education. It will also consider critically the development and implementation of a philosophy of Occupational Education.

ED 347 PRINCIPLES AND PRACTICES OF OCCUPATIONAL GUIDANCE (3) The vocational guidance process in both the elementary and secondary public schools will be studied. Approaches include counseling, group guidance and class instruction, the use of standardized tests and interest inventories, and cooperation with families, employers and other agencies. Phrased especially for Vocational Education Students.

ED 348 ORGANIZATION AND ADMINISTRATION OF OCCUPATIONAL GUIDANCE (3) Considers the goals, techniques, and administrative problems involved in organizing and administering a guidance program in a vocational school. The plan of guidance in society in general and in the school in particular will be studied. Problems of physical facilities and cost, and the utilization of community resources and in-service training will be discussed.

ED 349 INTERPERSONAL RELATIONS AND CONFERENCE LEADERSHIP (3) An examination and analysis of interpersonal and group relations. An appraisal of the processes which produce greater self-awareness, heightened sensitivity to others, and improved human relations in classroom practice. Emphasis is placed upon learning to deal with individuals and groups with greater understanding and skill.

ED 350 ORGANIZATION OF EARLY CHILDHOOD SETTINGS (3) An introductory course in the organization and implementation of pre-school curriculum, i.e. private-public-Head Start and Montessori programs for the very young child. Significant topics included in the course are: characteristics and stages of development of the normal and special needs young child, the study of the learning theories appropriate to the readiness skills of the pre-schooler and the examination of the curriculum programs integrating subject matter, i.e. reading, communication (oral and written), art, music, math, science, health and physical education. Participants will be expected to prepare a learning kit or appropriate activities for the pre-schooler in three (3) skill areas.

ED 351 MOTIVATING THE RELUCTANT READER (3) Provides the teacher with an ove-view of the developmental reading stages and the types of reluctant readers which can be found at each stage. The course further explores innovative approaches which can be used to produce an enthusiastic reader. The teacher has the opportunity to investigate in depth such areas as: oral reading as a motivational technique, develop reading leadership plans, behavior modification techniques, peer motivation and teaching, attitudinal surveys and non-traditional reading materials. Opportunity to implement some of these techniques and plans will be provided.

ED 354 PRACTICUM IN OCCUPATIONAL EDUCATION (6) A minimum of 150 clock hours of supervised student teaching experience in his/her subject field. Guidelines for evaluation and identified in the Westfield State College Student Teaching Handbook.

ED 356 TEACHING AND LEARNING: SECONDARY LEVEL I (3) Preparation for direct experience at the secondary level. In-depth study of: the value of educational principles viewed empirically, basic needs of secondary school students, determinants of attitude and motivation in relation to the secondary school student's immediate and long-range goals, general and specific teaching methods. Emphasis on flexibility in selection and utilization of teaching methods. Interdepartmental team teaching to include large groups, small groups, and individualized instruction. The student will be provided with pre-student teaching classroom observation and clinical experience.

ED 357 HISTORICAL FOUNDATIONS OF EDUCATION (3) Discussion of the American school from the colonial era to the present — its ideas, movements, intentions and goals — in the context of other social movements. The course is designed to increase the student's ability both in evaluation of current educational problems and in educational policy making. Emphasis will be placed upon the historical development of the American secondary school and upon meeting the needs of American society.

ED 358 INTERPERSONAL RELATIONS IN THE CLASSROOM (3) Examination and analysis of the theory and practice of interpersonal and group relations. Appraisal of the processes which produce greater awareness of oneself, heightened sensitivity to others and improved human relations in classroom practice. Emphasis upon greater understanding and skill.

ED 359 THE MIDDLE SCHOOL (3) An exploration of the ideas which underlie the conception, development, purposes, organization, and curricula of the middle school. Instruction and guidance functions will be considered in relation to the needs and characteristics of young adolescents.

ED 360 COMMUNITY SERVICE PLACEMENT (6) Involves eight weeks of field work experience in selected area agencies. The work is related to the occupational interests of the student but does not lead toward teacher certification. Placement provides an opportunity for the student to apply, test, evaluate and integrate in a responsible professional activity the knowledge, attitudes and skills he/she has learned in the classroom.

ED 361 TEACHING READING IN THE SECONDARY SCHOOL (3) The psychology of the reading process will be presented through application of basic reading concepts at the secondary level. Participants will examine the process of word recognition, word study skills, evaluation within reading, and rate and comprehension. Concurrently, students will examine developmental reading programs and will apply procedures and techniques for teaching reading in various subject matter areas.

ED 362 CURRICULUM DESIGN AND EVALUATION IN THE SECONDARY SCHOOL (3) An analysis of curriculum design and evaluation techniques resulting in the actual design of secondary curriculum. The role of teachers, administrators and other groups influencing curriculum will be reviewed.

ED 363 METHODS AND MATERIALS IN DRIVER EDUCATION (3) Examination of teaching methods and materials used in the instruction of both non-licensed and licensed drivers seeking additional proficiency. Particular emphasis will be placed upon psychological and attitudal problems of driver behavior. The course will include lectures, seminars, individual and group presentations, guest lectures, audio-visual material and on-the-road instruction.

ED 364 PRACTICA: MIDDLE SCHOOL (12) A minimum of three hundred clock hours of supervised student teaching in a selected middle school under the joint supervision of an experienced cooperating practitioner and college supervisor.

ED 365 TEACHING AND LEARNING: SECONDARY LEVEL II (3) Preparation for direct experience at the secondary level. Applied learning, values of objectives, lesson planning, evaluation, classroom management, grouping, classroom transactions, questioning techniques, modes and styles of teaching, programs designed to meet special needs.

ED 367 IDENTIFICATION, ASSESSMENT, PLACEMENT, AND PROGRAMMING IN SPECIAL EDUCATION (Severe) (4) Curriculum resources, methods and materials for children with severe special needs are developed on the basis of on-going diagnosis.

ED 368 IDENTIFICATION, ASSESSMENT, PLACEMENT AND PROGRAMMING IN SPECIAL EDUCATION (Young Child Special Needs) (4) Curriculum resources, methods and materials for young children (ages 3-7) with special needs are developed on the basis of on-going diagnosis.

ED 369 PRACTICA: SECONDARY SCHOOL (12) A minimum of three hundred clock hours of supervised student teaching in a selected secondary school under the joint supervision of an experienced cooperating practitioner and college supervisor.

ED 370 SPEECH AND LANGUAGE PROBLEMS OF THE SPECIAL NEEDS CHILD (3) Normal Speech and Language expectancies, problems of the special needs child in language acquisition, speech and hearing mechanisms. Speech and language pathologies, their incidence and etiology, Regulations of "766" and "94-142" regarding speech and language habilitation of difficulties.

ED 371 IDENTIFICATION, ASSESSMENT, PLACEMENT AND PROGRAMMING IN SPECIAL EDUCATION (Moderate) (4) Curriculum resources, methods and materials for children with moderate special needs are developed on the basis of on-going diagnosis.

ED 372 DIAGNOSTIC TECHNIQUES IN SPECIAL EDUCATION (3) This course is directed to all teachers of children with serious learning problems. The nature of this course is threefold; to develop competence in formal and informal assessment and diagnosis; in writing clear concise reports of test results, observations, interpretations, conclusion and prescriptive program; and in communicating results to professional and para-professional staff or as a member of a core evaluation. Attention is focused on both formal and informal diagnostic techniques to assess behavior and development in the basic skills of: reading, arithmetic, perceptual-motor (gross and fine), speech and language, writing and personal-social domains.

ED 373 CLINICAL EXPERIENCE (Moderate) (3) Advanced students are offered guided practicum experiences in selected schools for application of the theoretical foundations of the diagnostic-prescription approach to teaching pupils with moderate special needs. Each student is required to prepare an I.E.P. for a special needs pupil.

ED 374 CAREER EDUCATION FOR STUDENTS WITH SPECIAL NEEDS (3) Non-academic activities that contribute toward the improvement of self-concept and pre-vocational experiences for exceptional children. The selection of relevant activities will be based upon the assessment of individual needs as well as the content and process of various "careers".

ED 375 COMPREHENSIVE SERVICES IN SPECIAL EDUCATION (3) Home, school and community influences are analyzed in family adjustment to the presence of a handicapped child. Family reactions are considered in behavioral differences among the children with various degrees of disability. Emphasis is given to guidance skills and knowledge needed by teachers and other professional workers in the field of Special Education.

ED 376 DEVELOPMENTAL DISABILITIES (3) A developmental disability is a delay or failure to progress through the normal developmental milestones of childhood. The purpose of this course is to explore educational, social and legal issues that affect the opportunities of developmentally disabled individuals. Educational assessment and programming will focus on the developmental domains of motor, psycho-social, communication, cognitive functioning. A continuum of educational and community options will be described in order to acquaint the student with the least restrictive options needed to promote the growth of the developmentally disabled.

ED 377 STUDENTS WITH SPECIFIC LEARNING PROBLEMS (3) Introduction to the history and current practices in the diagnosis and remediation of learning disabilities, major theories of etiology, commonly used assessment instruments, and remedial materials and methods. Research findings, issues and controversies in the field will be discussed.

ED 378 STUDENTS WITH SPECIAL BEHAVIORAL/EMOTIONAL NEEDS (3) Psycho-educational assessment, identification, choice of intervention and management of children with special needs; behavioral difficulties, are main areas of study. The home, school, and community are considered in relation to the child's mental health.

ED 379 SPECIAL PROGRAM METHODS: BEHAVIOR DIFFICULTIES (3) Programs, methods curriculum and materials used in the education of the child with emotional or behavioral problems will be evaluated, both from the viewpoint of selecting appropriate learning experiences according to children's needs, as well as an examination of school curriculum as an influence on learning and behavior problems. The expanding role of the teachers will also be considered.

ED 380 THE DISADVANTAGED CHILD (3) Discussion of children from various ethnic, cultural, and linguistic backgrounds in terms of their physical, social, emotional, economic, psychological and educational needs. Emphasis placed on causal factors as well as factors affecting successful educational practice.

ED 381 EARLY INTERVENTION FOR YOUNG CHILDREN WITH SPECIAL NEEDS (3) The purpose of this course is to help students to gain an awareness of how early identification of handicapping or potentially handicapping conditions, along with appropriate remediation measures, can be the most beneficial way to help children to develop. The course will be divided into four main areas of study: Rationale, for early intervention and related legislation; Research; Casefind, Screening and Diagnosis; and intervention Strategies and Programs. Although the amount of the time spent in each area of study may vary, each area is of great importance in developing an understanding of the field.

ED 382 CLINICAL EXPERIENCE IN SPECIAL EDUCATION — YOUNG CHILD (3) Advanced students are offered guided practicum experiences in selected schools, for application of the theoretical foundations of the diagnostic-prescription approach to teaching young children with special needs. Each student is required to prepare an I.E.P. for a special needs child (ages 3-7 years).

ED 385 DEVELOPING AND ADMINISTERING COMMUNITY BASED RESOURCES (3) Focuses upon the procedures and programs needed for providing an easier transition along the continuum (from institutions to independence) for handicapped individuals. Various options for living, working and schooling are discussed. This course stresses the development and management of resources that aid in "communitization".

ED 386 EDUCATION AND TRAINING OF THE SUBSTANTIALLY HANDICAPPED CHILD (3) This course is a systematic study of neurophysiological deviations that cause severe disabilities. Emphasis is also placed on method and techniques for increasing motivation and improving performance. Students will develop an understanding of concepts and procedures necessary to write cooperatively with medical professionals, physical therapists, occupation therapists, communication specialists and parents.

ED 387 CLINICAL EXPERIENCE IN SPECIAL EDUCATION — SEVERE (3) Advanced students are offered guided practicum experiences in selected clinics or agencies and residential institutions, for application of the theoretical foundations of the diagnostic-prescription approach to teaching pupils with severe special needs. Each student is required to prepare an I.E.P. for a severe special needs individual.

ED 388 PRACTICUM: YOUNG CHILD WITH SPECIAL NEEDS (6-12) A minimum of 300 clock hours (12 cr.) of supervised student teaching experience in an approved setting for young children with special needs.

ED 389 PRACTICUM: SEVERE SPECIAL NEEDS (6-12) A minimum of 300 clock hours (12 cr.) of supervised student teaching experience in an approved setting for students in severe special needs.

ED 395 CLINICAL EXPERIENCE IN READING (3) Advanced clinical opportunities to work with pupils/students, individually and in small groups, in corrective reading instruction, remedial reading instruction, and developmental reading instruction at various settings.

ED 396 SEMINAR RECENT DEVELOPMENTS: COMPUTERS IN EDUCATION (3) This course requires no previous experience with computers and will be comprised of three major components: (a) an introduction to programming in BASIC and LOGO on microcomputers, (b) orientation and analysis of commercially available educational software and hardware, (c) analysis of both practical and theoretical issues related to the use of microcomputers in education.

ED 397 PRACTICUM: MODERATE SPECIAL NEEDS (6) A minimum of 150 clock hours of supervised student teaching experiences with students having moderate special needs.

ED 399 INDEPENDENT STUDY (3-9) Education majors are allowed to receive up to a maximum of nine academic credits, at the rate of three credits per semester, for engaging in independent study. Each study is taken as a part of a student's regular course load only. The student engaged in independent study will select and develop topics in the field of Education and related fields in cooperation with a professor from the Education Department, and the approval of the chairperson.

ENGLISH

Chair, Celeste M. Loughman

Edgar C. Alward, Brett Averitt, Amico J. Barone, George C. Camara, Porter D.H. Cole, Curt Curtin, Abe Delson, Leslie Kane, Robert R. Lehan, Frank E. Mello, Margaret A. Moran, Edward C. Powers, Bette B. Roberts, Frank A. Salvidio, Philip C. Shepardson, Stephen Sossaman, Harold E. Stessel, Henry Wefing, Barbara A. Welch.

English majors may choose from four distinct concentrations, each leading to a Bachelor of Arts degree: communications, journalism, literature, and speech-theater. Non-majors may also include in their programs one or more of the department's five minors: communications, journalism, literature, speech-theatre, and writing.

Department courses afford opportunities for developing the crucial verbal skills of analysis; synthesis, comprehensive and critical reading; extended and incisive writing; and clear, relevant thinking. In addition, English study provides, through rigorous analysis of major literary works, a unique experience in recognizing, evaluating, and articulating human values, motives, and qualities.

Westfield State College offers students of English a fully equipped professional theater; access to the campus television and radio station; a weekly college newspaper, staffed chiefly by journalism students; the latest word processing equipment; a literary magazine publishing outstanding student writing; and a Writing Center offering seminars and individualized self-help exercises.

Perhaps the most popular and successful feature is the department's internship program through which students gain valuable on-the-job experience with television and radio stations, newspapers, social services agencies, regional offices of national corporations, and staff offices of elected state and local officials.

Recent graduates majoring in English have accepted positions as reporters and editors, television staff members, theater directors, and corporate public relations officers. Some graduates have entered the teaching profession or management executive training programs; others have gone on to graduate school.

REQUIREMENTS FOR ALL ENGLISH MAJORS

1. English — a minimum of 39 credits
2. English Composition I and II — 6 credits
3. Foreign language — completion of at least two college semesters of one foreign language, unless in high school the student has (a) completed three years of study of one foreign language, or (b) completed two years of study in each of two foreign languages. A student may also satisfy the foreign language requirement by passing a proficiency examination designed and administered either nationally or locally.

REQUIREMENTS FOR LITERATURE CONCENTRATION

The following courses are required of English majors, both freshmen and transfer, if they concentrate in Literature.

1. EN 211-212, English Literature I-II — 6 credits.
2. EN 216-217, Nineteenth-Century American Literature and Modern American Literature — 6 credits.
3. EN 317, Shakespeare I — 3 credits.
4. One course in a major figure or period — 3 credits.
5. EN 348, History of the English Language, *or* EN 349, Structure of Modern English (required for teaching) — 3 credits.
6. EN 300, Development of the Novel — 3 credits.
7. A 300-level writing course.

The remaining 12 hours of electives are chosen from 300-level English courses; World Literature I and II (EN 221-222) are the only 200-level courses that count toward the major.

Teaching Secondary English

Those who wish to teach English in middle or secondary schools follow the Literature Concentration. They must also complete the professional education sequence in the Education Department (18 credits plus Practicum).

REQUIREMENTS FOR COMMUNICATIONS CONCENTRATION

Those students who pursue a Communications concentration must meet the general requirements for all English majors, Structure of Modern English or any Modern Foreign Language at the intermediate reading level, Structure of Modern English or History of the English Language, and the following Literature requirements: English Literature I and II, Nineteenth-Century American Literature and Modern American Literature,and two upper-division English courses.

The remaining 18 credits (for a total of 39) may be selected from the following courses, with at least 2 courses chosen from each of the 3 major headings.

Critical Communication:

EN 381 Television Drama
EN 367 Film Theory and Criticism
EN 393 History and Development of the Motion Picture
EN 399 Independent Study*

Written Communication:

EN 378 Writing for TV (Required)
EN 346 Creative Writing
EN 399 Independent Study*
EN 203 Effective Writing for Business
EN 374 Journalism I
EN 392 Business and Technical Writing

Oral Communication:

EN 395 Speaking on Radio and TV
EN 250 Oral Interpretation
EN 103 Speech
EN 399 Independent Study*

EN 380, Practicum in English (3-12 credits), is also available to juniors and seniors who wish to gain some career experience through an internship and earn some additional degree credit at the same time.

*Independent Study may be elected in only one of the three categories.

REQUIREMENTS FOR THEATRE CONCENTRATION

This concentration serves as preparation for those students who wish to prepare for a career in either professional or educational theatre. English majors concentrating in Theatre must complete at least 39 hours in theatre arts/ communications courses.

All students, majors and theatre arts minors alike, must also become members of the Westfield State College Theatre Company and participate in its activities for six semesters. (Transfer students consult the Theatre Coordinator.) Required courses are:

EN 225 Theatre Arts
EN 369 History of the Theatre
EN 366 Dramatic Literature
EN 365 Dramatic Criticism
EN 354 Vocal Techniques for the Stage
EN 352 Acting I
EN 357 Acting II
EN 355 Directing I
EN 362 Research Seminar
EN 353 Theatre Workshop (6 credits)
Electives: (a minimum of 2 courses from among the following)

EN 368 Directing II
EN 317 Shakespeare I
EN 318 Shakespeare II
EN 371 Playwriting
EN 356 Stagecraft and Design
EN 370 Modern Drama
EN 364 American Drama
EN 336 Contemporary Trends in Dramatic Literature
EN 321 Irish Theatre
EN 378 Writing for TV
EN 391 Speaking on Radio and TV
EN 381 Television Drama
EN 367 Film Theory and Criticism
EN 393 History and Development of the Motion Picture
EN 380 Practicum
EN 399 Independent Study

EN 380 and EN 399 are offered only after minimum electives have been completed.

REQUIREMENTS FOR THE JOURNALISM CONCENTRATION

Those students who elect the Journalism concentration must meet the general requirements for all English majors and complete the following required courses: English Literature I-II, Nineteenth-century American Literature, Modern American Literature, History of the English Language OR Structure of Modern English, and two upper-division English courses.

The remaining 18 credits (for a total of 39) are to be chosen from the following:

EN 374	Journalism I (required)
EN 375	Journalism II
EN 394	News Editing
EN 379	News Media Seminar
EN 384	Special Topics in Journalism
EN 231	History of Journalism
MS 101	Intro. to Mass Communications (Media Studies)
or	or
MS 304	Mass Media in Society (Media Studies)
MS 202	Intro. to Photography (Media Studies)

Students following the Journalism concentration must also join the staff of *The Owl,* the college newspaper, and participate in its activities for at least four semesters.

REQUIREMENTS FOR THE JOURNALISM MINOR

Regardless of their major discipline, students may take a minor in journalism. A grade of C+ or better in EN 101-102 is required, along with membership on *The Owl* staff and participation in its activities for at least four semesters (transfer students see the Chair).

Students take the following courses to complete the 18-hour minor:

1. EN 374 Journalism I (required)
2. 15 hours from:
   EN 375 Journalism II
   EN 377 Feature Writing
   EN 394 Editing
   EN 378 Writing for Television
   EN 395 Speaking on Radio and Television
   EN 379 News Media Seminar (senior year only)
   EN 380 Practicum in English (3-12 credits, senior year only)

REQUIREMENTS FOR THE LITERATURE MINOR

Students take 18 credits made up of the following courses:
EN 211-212 English Literature I and II

EN 216-217 Nineteenth-Century American Literature and Modern American Literature
EN 221 *or* EN 222 World Literature I and II
EN 317 Shakespeare I

REQUIREMENTS FOR THE THEATRE ARTS MINOR

Students take 18 credits made up of the following courses:

REQUIRED: EN 336 or EN 370 Dramatic Literature or Modern Drama
EN 369 History of the Theatre
EN 251 Theatre Arts
EN 352 Acting I

ELECTIVES: 6 credits from EN 103, EN 104, EN 202, 317-318, EN 321, EN 336, EN 356, EN 357, EN 359, EN 360, EN 364, EN 365, EN 367, EN 355 and EN 368, EN 380, EN 381, EN 399, EN 361.

PRACTICUM

Of special interest to English majors is the Practicum in English, EN 380. Through the Practicum, students can earn 3-12 college credits for on or off-campus work experience. Such experiences are often the beginning of lifetime vocational decisions.

COURSES

EN 100 LEARNING ENGLISH AS A SECOND LANGUAGE (0) Designed to teach English language skills to students whose native language is not English. A thorough study is made of the American English sound system, sentence patterns, vocabulary, transforms, and modification. In addition, students will have an opportunity to study American culture through language habits.

EN 101 & 102 ENGLISH COMPOSITION I & II (6) An intensive course in writing. In the Fall semester fundamentals of writing are stressed, including rhetoric, syntax, sentence structure, paragraph development and the writing of complete themes. An introduction to literature comes in the Spring semester during which the various types of fiction, drama and poetry are studied. Emphasis is on writing themes taken from literature. The techniques of the research paper are studied and a research paper is required. Successful completion of this course is a prerequisite for all other English courses offered.

EN 103 SPEECH (3) A course that gives students an opportunity to practice the fundamental principles of oral communication. It includes experience in organizing and delivering various kinds of talks, participating in group and panel discussions,and evaluating speech habits. Voice quality, articulation and pronunciation are studied.

EN 104 INTRODUCTION TO THE THEATRE (3) Acquaints interested students with the origins and nature of drama, dramatic literature and, in general, with major historical periods of Western theatre. Moreover, the theory and practice of the theatre arts of playwriting, acting, directing, set and lighting design, theatre architecture, costuming and makeup, technical production and theatre management will be studied and considered in the light of their creative and cultural impact on playgoers and playreaders, past and present.

EN 105 FRESHMAN ENGLISH SEMINAR (3) Designed as an EN 101 substitute for freshmen with high verbal ability and well-developed writing skills. Emphasis is on analysis and writing of thematically organized assignments with complexities well beyond those usually considered in EN 101.

EN 203 EFFECTIVE WRITING FOR BUSINESS (3) Designed to teach the fundamentals of writing for business. The form, structure, and content of resumes, business correspondence, analyses, reports, proposals, etc., will be covered with emphasis on the use of clear, concise, accurate language, free from jargon. Students will compile and retain a portfolio of business writing samples. *Prerequisite: EN 102.*

EN 211 ENGLISH LITERATURE I (3) English literature from Beowulf through the late 17th century. The chronological development of English literature will be stressed. Required of all English majors except those in Speech and Theatre.

EN 212 ENGLISH LITERATURE II (3) English literature from the late 17th century to the 20th century. Required of all English majors except those in Speech and Theatre.

EN 213 MAJOR BRITISH WRITERS (3) Designed for non-English majors, the course consists of a study of the most prominent writers of English literature through representative selections.

EN 215 MAJOR AMERICAN WRITERS (3) Designed for non-English majors, the course consists of a study of the most prominent writers of American literature through representative selections.

EN 216 19TH CENTURY AMERICAN LITERATURE (3) Surveys the major figures of the century from Poe to James. Attention is directed toward the cultural and historical context of our literature. Required of all English majors except those concentrating in Speech and Theatre.

EN 217 MODERN AMERICAN LITERATURE (3) A Study of 20th century American literature in the light of significant social and literary trends. Featured are major authors from Dreiser through O'Neill to Hemingway. Required of all English majors except those concentrating in Speech and Theatre.

EN 221 WORLD LITERATURE I (3) A comparative study of literature in the Western world presented through lectures and the reading and discussion of masterpieces in translation. Included are such works as *The Aeneid, The Divine Comedy, Greek dramas and selected works of Plato, Homer, Cervantes, and others.* Required of English majors preparing to teach.

EN 222 WORLD LITERATURE II (3) A continuation of EN 221 featuring outstanding works in translation. Representative writers included may be Rousseau, Goethe, Balzac, Flaubert, Dostoevsky, Rimbaud, Gide, and others.

EN 223 THE BIBLE AS LITERATURE (3) An examination of the Bible's legends, folk tales, songs, and historical narratives in relation to classical mythology as seminal ideas and themes in English literature.

EN 224 BLACK AMERICAN LITERATURE (3) Critical study of the Black in American Literature from two vantage points: the new image of the black in the works of major American writers, and the image of the Black and of Americans in work created by American Black writers.

EN 225 THE SHORT STORY (3) Extensive readings of short stories of various periods representing different countries. Special attention is given to the theme and form of each story.

EN 226 LITERATURE BY AND ABOUT WOMEN (3) A consideration of literary works (in different genres and from different eras) which include stereotyped images of women. The course will examine writings by both male and female authors in an attempt to compare or contrast disparate visions of the woman in life roles.

EN 227 CONTEMPORARY LITERATURE (3) A study of various types of literature of the 20th century and the influence of the period on such literature. Plays, different forms of fiction, and poetry are read and discussed.

EN 228 INTRODUCTION TO SHAKESPEARE (3) Designed for students who are not majoring in English, this course provides a basic knowledge of Shakespeare's dramatic forms, poetry, characterization, theatrical method, and insight into human nature. No student may receive credit for this course if credit is received for either EN 317 (Shakespeare I) or EN 318 (Shakespeare II).

EN 229 SCIENCE FICTION (3) Science fiction works of the 19th and 20th centuries, with emphasis on more current works. The study of the literature is augmented by study of the influences from science and the general culture. Science fiction will be studied as a literary form and in relation to the peculiar issues and themes which it raises.

EN 230 JEWISH-AMERICAN WRITERS (3) A study of Jewish-American writers with special focus on the immigrant experience, the response to the Holocaust, and the problems of assimilation and identity. Readings will include representative works by Abraham Cahan, Henry Roth, Philip Roth, Bernard Malamud, Saul Bellow, Irwin Shaw, Chaim Potok, and others. In addition to reading literary works, students will consult appropriate sources dealing with religious, social, and historical backgrounds.

EN 250 ORAL INTERPRETATION (3) Geared towards aiding those students interested in broadcasting, acting, or teaching careers. In an informal group setting, the student will pursue the heightening and sharing of his/her sensitivities in relation to a wide choice of written materials including drama, children's literature, documentaries, fiction, editorials, scripts, and poetry. At the same time, the course will concentrate on using and developing the full range of the voice as the vehicle to communicate the student's sensitivities and interpretations.

EN 251 THEATRE ARTS (3) Designed to give the student a better understanding of the art of the theatre as a medium of culture. Students will become acquainted with lighting for the stage, costume and stage design, and make-up. As a part of the course, students will have an opportunity to gain first-hand experience in working in play productions by participating in them.

EN 252 THEATRE PRACTICE (1 transcript credit) Designed specifically for those students who will take part in the major production of the semester, non-theatre minors included. As actors, stagehands or those participating in costume, scenic design or lighting, their work will be evaluated by the director of the production. All English majors with a concentration in speech/theatre and theatre minors are expected to register for theatre practice for at least six semesters.

EN 300 DEVELOPMENT OF THE NOVEL (3) A study of the novel as a literary form from the eighteenth century to the present. Emphasis will be on the shaping influences of the English novel of the 18th and 19th centuries, and among the works to be included are those of Richardson, Fielding, Sterne, Austen, Eliot, Dickens, and Hardy. Twentieth-century innovations in the form will be considered through such writers as Joyce, Lawrence, Faulkner, Robbe-Grillet, and Barth. Novel theorists such as Flaubert, James, and Ortega will also be included.

EN 310 THE IRISH IN LITERATURE (3) A study of selected works by Irish writers primarily of the 19th and 20th centuries. Some consideration will be given as well to important earlier works which contribute to the Irish literary tradition. The works will be examined in a sociological and cultural light in an attempt to identify those elements of Irish life which stirred the imagination of that nation's writers. Throughout the course emphasis will be placed on the reading of a wide variety of primary sources.

EN 311 THE BRITISH NOVEL (3) A study of the development of the novel as a genre, its literary origins and its relationship to society. Readings begin with 18th-century novelists such as Defoe, Richardson, Fielding, Smollett, and Sterne and continue with 19th-century representatives: Austen, Dickens, Eliot, Hardy, and Conrad.

EN 313 MEDIEVAL ENGLISH LITERATURE (3) A study of the outstanding English literature of the 12th, 13th, 14th, and 15th centuries (excluding Chaucer). Poems, dramas, sermons, and other prose works will be studied in the perspective of literary and historical traditions.

EN 314 MILTON (3) A study of the man and his works including *Paradise Lost* and selected poetry and prose.

EN 315 17th CENTURY ENGLISH LITERATURE (3) Literature of this period from Donne and Jacobean drama to Marvell and Dryden.

EN 317 SHAKESPEARE I (3) A study of the tragedies and early comedies of Shakespeare including some consideration of his sources, his use of Elizabethan ideas, and his theatre.

EN 318 SHAKESPEARE II (3) A study of the historical plays and later comedies.

EN 319 VICTORIAN LITERATURE (3) A study of literary responses to the impact of industrialism, science and modernism upon England's society and culture between 1830 and 1900. Readings include: Carlyle, Ruskin, Newman, Mill, Tennyson, Browning, Arnold, Dickens, Eliot.

EN 320 CHAUCER (3) Readings will include *The Canterbury Tales* and other selected works, with as much attention to Middle English as is necessary for an understanding of the texts.

EN 321 IRISH THEATRE (3) A course in the development of modern Irish theatre from its origins at the turn of the 20th century to the present. The plays and artistic credos of Yeats, Shaw, Lady Gregory, Synge, O'Casey and Behan will be studied in addition to the representative works of other important Irish dramatists.

EN 323 THE AMERICAN NOVEL (3) At least one major work of fiction of a selected group of American novelists beginning with those of the mid-nineteenth century and including others to the present day. *Prerequisite: 6 s.h. American Literature Studies.*

EN 324 MODERN POLITICAL NOVEL (3) A study of the development, in English and American literature since 1865, of the novel as a medium for discussing and influencing political theories and movements. Elements such as propaganda, sentimentality, and oversimplification of issues will be stressed. Authors to be considered include Dickens, Disraeli, George Eliot, H. G. Wells, Henry Adams, de Forrest, Twain, Drury, O'Connor, and Robert Penn Warren. *Prerequisite: EN 101-102 and consent of the instructor.*

EN 325 AMERICAN FICTION: THE ROMANTIC AND THE GOTHIC (3) Surveys 19th and 20th century American works which explore unusual experiences and heightened state of consciousness; and show a fascination with the mysterious, the magical, and the melodramatic. Writers to be considered include Charles Brockden Brown, Poe, Hawthorne, Melville, James, Lovecraft, Faulkner, Flannery O'Connor, and Vonnegut. *Prerequisite: EN 215, 216, or 217.*

EN 332 ROMANTIC LITERATURE (3) A study of the prose and poetry of the major writers of the Romantic Age. The course satisfies the period requirement for English majors.

EN 333 REPRESENTATIVE EUROPEAN NOVELISTS (3) To acquaint advanced students of literature with novelistic approaches to modern European literature, placing special emphasis on the representative writings of such significant authors as Joyce, Mann, Kafka, Camus, Gide and others. Study will include structural and stylistic analyses.

EN 337 EUROPE AND WESTERN LITERATURE (FIELD STUDY) (3) A course designed to make the best use of firsthand experiences of the cultural legacy of Western Europe (performing arts, museums, historical sites, etc.) as a means of gaining further insight into the values, meanings, and styles of major literary works in Western literature. Students will combine a two-three-week period of organized and supervised travel in Europe with subsequent attendance at seminars and development of papers to articulate their newly acquired understanding of their readings of particular literary works.

EN 338 HIGH SCHOOL LITERATURE AND THE ADOLESCENT (3) A detailed examination of the teaching of literature in the junior and senior high school, with emphasis on literature written expressly for adolescents. Attention will also be given to related matters: (1) the objectives and functions of literature study interspersed and in the entire school program; (2) a pedagogical approach to major genres; (3) new approaches to literature study; (4) methods of teaching reading. In short, this course ought to aid teachers who wish to improve the way they teach literature to their students.

EN 339 LITERATURE OF THE 18TH CENTURY (3) Students will study Dryden, Johnson, Pope, Swift, and other major writers of the century.

EN 341 SEMINAR IN MAJOR BRITISH AND AMERICAN AUTHORS (3) A study of significant works by major literary figures. Each seminar will feature the works of one or two literary figures. The names of the figures will be announced in advance of the seminar and will be included in the course title.

EN 342 RESEARCH SEMINAR IN ENGLISH (6) Advanced work in English which will include guided individual study of an approved topic, and the reading of a prescribed list of books drawn from English and American literature. Members of the department will assist those students whose special interests coincide with the specialized area of the instructors. Students must have the approval of the Department Chair to take this course.

EN 344 STUDIES IN SATIRE (3) A study of the development of English satire to the present, examining its gradual and skillful integration of three basic elements: invective, burlesque, and irony. To avoid simplistic judgments, the course will include readings in both theory and practice.

EN 346 CREATIVE WRITING (3) For qualified students interested in identifying and developing their special writing abilities. The techniques of writing fiction, drama, and verse will be studied.

EN 347 ADVANCED WRITING TECHNIQUES (3) Designed to develop formal writing ability on scholarly topics. Intensive library research will precede all writings. The goal of the course is to provide students with the research and writing skills necessary in the preparation of papers of publishable quality. Non-English majors will be encouraged to select subjects related to their fields of study.

EN 348 HISTORY OF THE ENGLISH LANGUAGE (3) A study of the development of English from its Indo-European origins to the present day, including an historical survey of changes in structure, sounds, and meaning.

EN 349 THE STRUCTURE OF MODERN ENGLISH (3) A study of the origin and development of the English language with emphasis on its present structure and usage.

EN 351 TEACHING ENGLISH IN THE SECONDARY SCHOOL (3) Information and philosophy about teaching English to prepare the teacher to assess his/her teaching and maintain quality instruction. Includes modern approaches to literary significance, varieties of usage, new approaches to the study of grammar, handling of written work, contribution of semantics, study of textbooks, observation of superior instruction, survey of professional organizations.

EN 352 ACTING I (3) An introductory course in the art and craft of the actor; designed to make the student aware of personal outer and inner resources and to provide the student with work-habits and tools which help him/her to approach the actor's task with understanding. *Prerequisite: EN 251.*

EN 353 THEATRE WORKSHOP (6) A six-credit course consisting of theory and practice as well as seminars in acting, directing and theatre arts. In addition, participants will perform in six one-act plays, each of which will be staged at the college theatre.

EN 354 VOCAL TECHNIQUES FOR THE STAGE (3) Fundamentals of learning effective vocal production for the theatre, with special emphasis in areas of interpretation and character analysis, clarity and quality of voice for performance. *Prerequisite: EN 251.*

EN 355 DIRECTING I (3) A study of the process of play direction. Styles and techniques in directing will be emphasized with practice in the staging of scenes from representative plays. *Prerequisite: EN 251 and EN 352.*

EN 356 STAGECRAFT AND DESIGN (3) Consists of a study of the visual elements of theatre, the theories of stage design, color and line, and the building and painting of scenery. Consideration will also be given problems of lighting and make-up and their relationship to play production. An extension of Theatre Arts, but dealing more with theory. *Prerequisite: EN 251.*

EN 357 ACTING II (3) Working on a role. The creation of simple reality through listening, talking, body and voice control, and character justification as applied to actual texts; breakdown of the inner action and visual score of the role, including exercises and experiments in imagery and rhythm; scenes and one-act plays will be presented in class with class analysis and criticism as learning reinforcement. *Prerequisite: EN 352.*

EN 362 RESEARCH SEMINAR IN SPEECH AND THEATRE (3) Advanced research in Speech and Theatre, and mass communications, which will include guided individual study of an approved topic of research in speech, theatre and mass communications. Members of the department will assist and guide those students whose special interests coincide with the specialized areas of the instructors. Students majoring in Speech and Theatre will be required to take this course. *Prerequisite: Departmental approval.*

EN 364 AMERICAN DRAMA (3) Emphasis on the development of the dramatic form in America. Plays that are read and discussed demonstrate that there is a native American dramatic tradition and that experimentation is one of its characteristics. The plays also reflect significant development in and through culture.

EN 365 DRAMATIC CRITICISM (3) A study of historic and present day criticism of plays and movements in theatre. Attention will be given to theories of drama and playwriting. *Prerequisite: EN 366.*

EN 366 DRAMATIC LITERATURE (3) A critical evaluation of representative plays of the important periods o theatre, including outstandings plays of Greece, Italy, Germany, Sweden, Spain, Russia, England and the United States. An attempt is made to understand in depth the influence of the times upon the plays and authors studied. *Prerequisite: EN 369.*

EN 367 FILM THEORY AND CRITICISM (3) A study of the basics of film communication, various film modes and structure. A development of bases for evaluation of films according to communicative and aesthetic values will be a primary aim.

EN 368 DIRECTING II (3) Function of the director as interpreter, organizer, teacher, and stage manager in relation to the overall production; problems of involved physical staging, based on analysis of ground plan, interpretation, and craft procedures; relationship of the director to the set, lighting, and costume designers; special emphasis on creative interrelationship between the actor and director, as related to the interpretation and acting out of a play. Students will be required to direct at least a one-act play. Scenes and laboratory work with class analysis and criticism will be included. *Prerequisite: EN 355.*

EN 369 HISTORY OF THE THEATRE (3) An introductory course concerned with the historical development of the theatre. It will consist of a survey of the origins of Western theatre from Greece to the present time.

EN 370 MODERN DRAMA (3) Plays, beginning with those of Ibsen, and ending with contemporary playwrights, will be read and discussed. The modern plays will be compared with those of other periods. The development of various approaches and techniques used by playwrights will also be studied.

EN 371 PLAYWRITING (3) The techniques of the craft of playwriting. Students will have an opportunity to write one of the basic types of plays: a children's play, pageant, one-act or three-act. Individual cnferences will supplgment the class discussion and analysis of student writing.

EN 374 JOURNALISM I (3) An introduction to the technique of writing news stories, feature articles, and editorials, in addition to a study of journalistic standards. Also included will be news editing, headline writing, copy editing, judging the news, and the editor and the law. Media covered will include newspapers, news magazines, television and radio news.

EN 375 JOURNALISM II (3) Training in the writing of background stories, situation stories, columns, news analysis, investigative techniques, and the art and craft of making news understandable. *Prerequisite: EN 374.*

EN 376 MODERN BRITISH AND AMERICAN POETRY (3) Reading and discussion of the foremost English and American poets from Hardy and Housman to such contemporary writers as Eberhart, Spender and Lowell. Special attention is given to the experimental forms and the modern thought of the poetry.

EN 377 FEATURE WRITING (3) Preparation of articles aimed at periodical markets. Analysis of markets. Designed to show the student not only how to write for publication, but also how to market material written for the non-fiction field. *Prerequisite: Permission of instructor.*

EN 378 WRITING FOR TELEVISION (3) Shows the student how to write for various aspects of this medium including creative public service announcements, educational documentaries, newscasts, promotional material, and copywriting in general. Students will write their own scripts utilizing actual professional script models. At least one field trip will be made to a professional studio.

EN 379 NEWS MEDIA SEMINAR: CONCEPTS AND ISSUES (3) A seminar in which participants will conduct an analysis of American mass communications, specifically an examination of the development of news media and an evaluation of its control. Various components of the news media (wires, syndicates, networks, newspapers, magazines and books, radio and television) will also be evaluated as will their news coverage of such areas of public interest as government, violence and crime, national security and war, minorities and women, and specialized news. *Prerequisite: Journalism II and consent of the instructor.*

EN 380 PRACTICUM IN ENGLISH (3-12) A practical internship program for English majors who want to gain real experience in on-the-job training such as television, radio, report writing, news writing, insurance underwriting, speech therapy, linguistic research, education, editing, public relations, and advertising. Students will participate for a stipulated period under professional supervision and will be periodically observed by college faculty.

EN 381 TELEVISION DRAMA (3) Because television actually has its own unique drama form and technique in contrast to those plays written for the theatre, this course will examine the various differences and the specific challenges for the television playwright. The student will study some of television's most critically acclaimed plays from the 1950's to the present. Included will be the works of such television dramatists as Paddy Chayefsky, Reginald Rose, Rod Serling, Robert Crean, Ronald Ribman, Stanley Gray, and Loring Mandel. The original television scripts will be studied from teleplay anthologies now available in paperback. *Prerequisite: six credits of literature courses.*

EN 386 NEW PERSPECTIVES IN STUDYING MODERN ENGLISH (3) A comparison of traditional and modern grammar designed to illustrate the effectiveness of the modern approach. Writings on the latest dictionaries, changes in word meanings, and controversies about grammar will be read and discussed.

EN 387 WORLD DRAMA (3) This course deals mainly with discussion, interpretation and critical evaluation of selective texts from the world's drama (from the Greeks to the present) emphasizing genres and periods. Consideration will also be given to the ideas, structures, styles, and techniques of dramatic literature.

EN 391 SPECIAL STUDIES IN FILM (3) Intensive study of significant individuals, groups, topics, or movements in the development of film.

EN 392 BUSINESS AND TECHNICAL WRITING (3) An advanced course, designed to teach effective writing techniques for specific application to business and to give students experience in the preparation of a variety of business letters and reports. Study includes advertising, technical bulletins, instruction manuals, specifications, and press releases. Students will leave the course with a portfolio of technical writing samples. A number of writing, research, and editing skills will be studied. *Prerequisite: EN 102 (juniors and seniors only).*

EN 393 HISTORY AND DEVELOPMENT OF MOTION PICTURES (3) A study of the evolution of the motion picture as an international art form and social force. Students will make an analysis of form, technique and impact of film. A selected screening of representative film styles and content will be made.

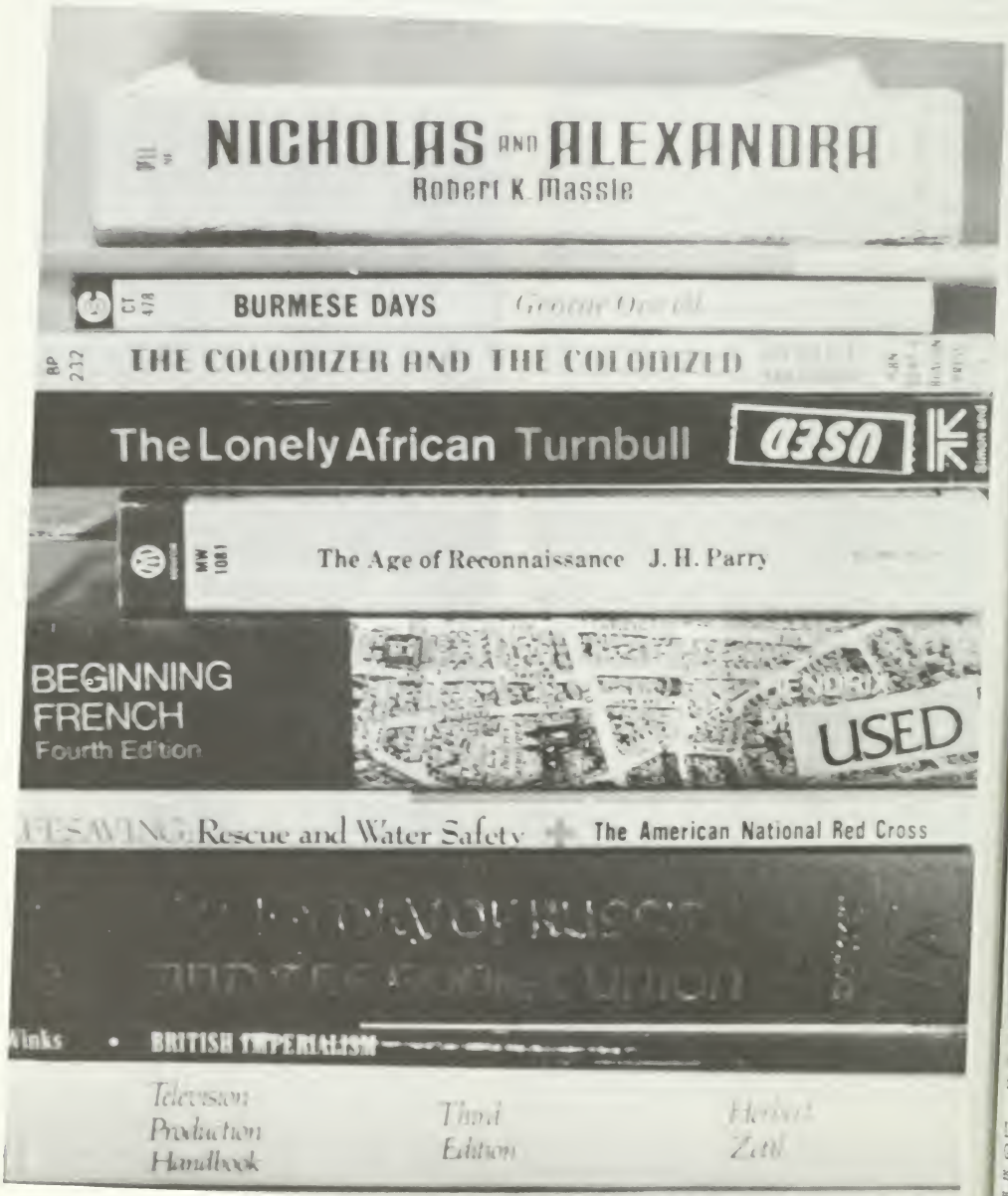
EN 394 NEWS EDITING (3) News selection, preparation and display. Editing to save space, to make the news meaningful, judging the news headline writing, the editor and the law. *Prerequisite: EN 374.*

EN 395 SPEAKING ON RADIO AND TELEVISION (3) Directed toward those students interested in broadcasting careers or in heightening their awareness of the extensive contrasting oral approaches used in both media. Utilizing actual in-studio environs, individual instruction, and classroom involvement, the course will expose the student to all the varying speaking situations and the expertise needed. Some of the key areas to be covered will be general radio and television announcing and the differences between the two, interviewing style and techniques, narration, panel discussions, talk programs, newscasting and sportscasting.

EN 397 SPECIAL TOPICS IN LITERATURE (3) Focuses on a specific period, genre, writer, or group of writers, chosen in keeping with the instructor's field of specialization and in response to student interest. *Prerequisite: a 200-level literature course.*

EN 399 INDEPENDENT STUDY (3-6) Independent work in a field of special interest in either literature or language not covered by our regular course offerings. The student will be assigned a faculty member qualified to supervise the independent study project. The student must apply to the department Chair at least one semester in advance of the one during which he/she engages in the study and the project must be approved by the Department Curriculum Committee.

FRENCH (SEE FOREIGN LANGUAGES AND LITERATURES)



FOREIGN LANGUAGES AND LITERATURES

Chair, Kathleen McIntosh

Noemi Escandell, Walter J. Jensen, Raymond Ourand, Matteo Rovetto, Napoleón Sánchez

The Department of Languages offers a sequence of courses of graduated difficulty in the languages of four other peoples which have most influenced our civilization: French, German, Italian and Spanish. In addition, we offer courses which introduce the student to the cultures of those peoples through lectures and readings in English. These courses are also part of the General Education core. From time to time other languages e.g. Chinese, Russian, Esperanto, have been offered for both credit and non-credit through the Division of Continuing Education.

The department offers the student the opportunity to gain a working knowledge of one or more languages through minor concentrations in French, German, Italian and Spanish. The minor consists of a minimum of eighteen credit hours including the 103 and 104 courses in each language. The major programs in French and Spanish require a minimum of thirty-six credit hours. These programs provide the student with a strong liberal arts education and an in-depth study of the language and cultural achievements of the French and the Spanish-speaking peoples.

A working knowledge of another language provides opportunities in business and commerce, government and social services and in professional careers.

REQUIREMENTS FOR FRENCH AND SPANISH MAJORS

French Major

Requirements: a minimum of 36 credit hours including

LF 103 and LF 104 or the equivalent
LF 200 French Conversation
LF 201 Readings in French Literature
LF 202 French Composition
LF 203 French Civilization
LF 300 French Literature I
LF 301 French Literature II
plus at least 12 credits of French electives.

Spanish Major: a minimum of 36 credit hours including:
LS 103 and LS 104 or the equivalent
plus 6 courses from the 200 level and
at least 4 courses from the 300 level.

COURSES TAUGHT IN ENGLISH

LL 101 INTRODUCTION TO THE STUDY OF LANGUAGE (3) An examination of the procedures used in the study of the phenomenon of language; a study of the structure of the world's most spoken languages; a history of the Indo-European language family. *No prerequisite.*

LL 102 ESSENTIALS OF LATIN (3) An introduction to basic Latin vocabulary in order to emphasize the impact of Latin on English vocabulary through etymological studies and exercises. Word derivation will be stressed. *No prerequisite.*

LL 103 METHODS OF TEACHING LANGUAGE (3) An introduction to the professional aspects of teaching foreign languages including the selection and evaluation of materials and methodologies, use of the laboratory, etc. *No prerequisite.*

LE 101 FRENCH CULTURE (3) An introduction to the people and ideas which have shaped the culture of the French-speaking world. *No prerequisite.*

LE 102 GERMAN CULTURE (3) An introduction to the people and ideas which have shaped the culture of the German-speaking world. *No prerequisite.*

LE 103 ITALIAN CULTURE (3) An introduction to the people and ideas which have shaped the culture of the Italian-speaking world. *No prerequisite.*

LE 104 HISPANIC CULTURE (3) An introduction to the people and ideas which have shaped the culture of the Spanish-speaking world. *No prerequisite.*

FRENCH

LF 101 FRENCH I (3) The first course in the French language sequence. An introduction to the sounds and basic grammatical structures of standard conversational French. Stress on oral comprehension and speaking as well as the reading and writing of simple grammatical patterns. Vocabulary is limited to about 400-500 of the most used words. *No prerequisite.*

LF 102 FRENCH II (3) The second course in the French sequence. Stress on oral comprehension and speaking as well as the increased practice of reading and writing. Additional active vocabulary of 400-500 of the most common items. *Prerequisite: one semester of college or one year of high school French.*

LF 103 FRENCH III (3) The third course in the French sequence. Stress on oral comprehension, speaking, reading and writing about topics dealing with contemporary life in the French-speaking world. An additional active vocabulary of 400-500 new words. *Prerequisite: two semesters of college or two years of high school French.*

LF 104 FRENCH IV (3) The fourth course in the French sequence. Continued emphasis on the four language skills with topics about contemporary life. Additional vocabulary of 400-500 new words. *Prerequisite: three semesters of college or three years of high school French.*

LF 200 FRENCH CONVERSATION (3) A course which enables the student to practice the vocabulary and the conversational patterns which have already been learned while expanding both vocabulary (300-400 new items) and self-expression. *Prereqisites: LF 104 or the equivalent.*

LF 201 READINGS IN FRENCH LITERATURE (3) Selected readings on an intermediate level. The goal is the development of the student's vocabulary and reading skills. Reading material will be drawn from various appropriate sources. *Prerequisite: LF 104 or the equivalent.*

LF 202 FRENCH COMPOSITION (3) A course which offers the student the opportunity to practice writing French. Assignments will include the writing of expository prose, personal and business letters. *Prerequisite: LF 104 or the equivalent.*

LF 203 FRENCH CIVILIZATION (3) An examination of the elements which have formed the culture of present-day society in the French-speaking world. Special attention will be paid to the people and ideas whose contributions embody the spirit of French culture. A working knowledge of French is required. *Prerequisite: LF 104 or the equivalent.*

LF 300 FRENCH LITERATURE I (survey) (3) A survey of French literature from the medieval era to the beginning of the Nineteenth Century; a critical analysis of selected works by the leading literary figures. *Prerequisite: LF 201 or the equivalent.*

LF 301 FRENCH LITERATURE II (survey) (3) A survey of French literature in the Nineteenth and Twentieth Centuries; a critical analysis of selected works by the leading literary figures. *Prerequisite: LF 201 or the equivalent.*

LF 302 CLASSICISM (3) An examination of the literature, philosophy and aesthetics of French Classicism through the works of its most representative exponents. *Prerequisite: LF 300 or the equivalent.*

LF 303 ENLIGHTENMENT (3) An examination of the literature, philosophy and aesthetics of the Enlightenment through the works of its most representative exponents. *Prerequisite: LF 300 or the equivalent.*

LF 304 ROMANTICISM, REALISM, SYMBOLISM (3) An examination of the main literary trends of the Nineteenth Century through the works of their most representative exponents. *Prerequisite: LF 301 or the equivalent.*

LF 306 CONTEMPORARY LITERATURE (3) An examination of the major literary works of the Twentieth Century. *Prerequisite: LF 301 or the equivalent.*

LF 399 INDEPENDENT STUDY (3) A course offered by special arrangement to the student interested in studying a specific aspect of French literature. A reading knowledge of French is required. *Prerequisite: LF 300 or LF 301 or the equivalent.*

GERMAN

LG 101 GERMAN I (3) The first course in the German language sequence. An introduction to the sounds and basic grammatical patterns of standard conversational German. Stress on oral comprehension and speaking. Vocabulary is limited to about 300-400 of the most used words and expressions. *No prerequisite.*

LG 102 GERMAN II (3) The second course in the German sequence. Stress on oral comprehension and speaking plus the reading and writing of simple sentence patterns. Additional active vocabulary of 400-500 new words. *Prerequisite: one semester of college or one year of high school German.*

LG 103 GERMAN III (3) The third course in the German sequence. Stress on oral comprehension and speaking, reading and writing about topics dealing with contemporary life in the German-speaking world. Additional active vocabulary of 400-500 new items. *Prerequisite: one year of college or two years of high school German.*

LG 104 GERMAN IV (3) The fourth course in the German sequence. Continued emphasis on the four language skills with topics drawn from contemporary life in German-speaking Europe. An additional vocabulary of 400-500 new items. *Prerequisite: three semesters of college or three years of high school German.*

LG 200 GERMAN CONVERSATION (3) A course which enables the student to practice the vocabulary and conversational patterns which have already been learned while expanding both vocabulary (300-400 new items) and self-expression. Topics will be taken from newspaper and magazine articles dealing with current issues. *Prerequisite: LG 104 or the equivalent.*

LG 201 READINGS IN GERMAN LITERATURE (3) Selected readings on an intermediate level whose goal is the development of the student's vocabulary and reading skills. Reading material will be selected from the most current sources, and will include topics dealing with politics, business and commerce, the social scene and the arts. *Prerequisite: LG 104 or the equivalent.*

LG 202 GERMAN COMPOSITION (3) A course which offers the student the opportunity to practice writing in German. Assignments will include the writing of personal and business letters and expository prose. *Prerequisite: LG 104 or the equivalent.*

LG 203 GERMAN CIVILIZATION (3) An examination of the elements which have formed the culture of present-day society in German-speaking Europe. Special attention to the people and ideas whose contributions embody the spirit of German culture. A working knowledge of German is required. *Prerequisite: LG 104 or the equivalent.*

LG 399 INDEPENDENT STUDY (3) A course offered by special arrangement to the student interested in studying a specific aspect of German literature. A reading knowledge of German is required. *Prerequisite: LG 201 or the equivalent.*

ITALIAN

LI 101 ITALIAN I (3) This is the first course in the Italian language sequence. It is designed to introduce the student to the Italian language and to provide a foundation in both spoken and written Italian. Basic structures and vocabulary will be covered. *No prerequisite.*

LI 102 ITALIAN II (3) The second course in the Italian sequence will continue with more basic structures and will introduce short reading selections from contemporary works, as well as aspects of Italian culture. *Prerequisite: one semester of college or one year of high school Italian.*

LI 103 ITALIAN III (3) The third course in the Italian sequence will review and expand structures and vocabulary by means of conversations, compositions and oral reports in order to increase fluency in spoken and written contexts. *Prerequisite: two semesters of college or two years of high school Italian.*

LI 104 ITALIAN IV (3) The fourth course in the Italian sequence will continue to drill on structures and more advanced vocabulary so that by this time the student will be able to express himself in a correct and natural way. Emphasis will be put on phonetics. *Prerequisite: three semesters of college or three years of high school Italian.*

LI 200 ITALIAN CONVERSATION (3) This course enables the student to practice the vocabulary and conversational patterns which have already been learned while expanding both vocabulary and self-expression. Topics will be drawn from newspaper and magazine articles which deal with current issues. *Prerequisite: LI 104 or the equivalent.*

LI 201 READINGS IN ITALIAN LITERATURE (3) An introduction to the major authors of Italian literature from Dante to modern authors. General trends, movements, genres will be emphasized. Lectures and discussions in Italian will be supplemented by selected readings from major writers. *Prerequisite: LI 104 or the equivalent.*

LI 202 ITALIAN COMPOSITION (3) Emphasis on writing. Compositions, both guided and free, will be assigned on a regular basis. Written reports will also be expected of students. *Prerequisite: LI 104 or the equivalent.*

LI 203 ITALIAN CIVILIZATION (3) A study of the development of Italian civilization from the Middle Ages to the present. It will consist of a rapid, cursory study of Italian history, literature, art music, as well as social and political problems. Lectures and discussions in Italian. *Prerequisite: LI 104 or the equivalent.*

LI 399 INDEPENDENT STUDY (3) A course offered by special arrangement to a student interested in studying an aspect of Italian literature. A reading knowledge of Italian is required. *Prerequisite: LI 201 or the equivalent.*

SPANISH

LS 100 SPANISH FOR HISPANICS (3) A course in reading and writing Spanish for those who are native speakers of the language. Aims at improved knowledge of grammar, orthography and paragraph structure, lexical expansion, and facility in composition. Attention to interference from English syntactic patterns. Brief readings from selected Hispanic authors as basis for discussion and composition. *No prerequisite.*

LS 101 SPANISH I (3) The first course in Spanish for those who have never studied the language before. Through an introduction to both sounds and basic grammatical structures, it will provide the student with a foundation in both spoken and written Spanish. In this course the emphasis will be on oral comprehension and speaking, and acquisition of a limited, basic vocabulary.

LS 102 SPANISH II (3) The second course in the Spanish sequence. Stress on oral comprehension and speaking will continue, along with increased practice in reading and writing, and enlargement of active vocabulary. *Prerequisite: one semester of college or one year of high school Spanish.*

LS 103 SPANISH III (3) The third course in the Spanish sequence will review and seek to expand students' understanding of grammatical structures. Increased emphasis on reading and writing through materials dealing with aspects of the Spanish-speaking world. *Prerequisite: two semesters of college or two years of high school Spanish.*

LS 104 SPANISH IV (3) The fourth course in the Spanish sequence. Stress on reading and some practice in writing, and on the acquisition of new vocabulary. The four language skills — listening, speaking, reading and writing — will be practiced in relation to topics dealing with the Spanish-speaking world and with contemporary life. *Prerequisite: three semesters of college or three years of high school Spanish.*

LS 200 SPANISH CONVERSATION (3) Conversation based upon a wide variety of topics both extemporaneous and assigned. Practice with often used expressions and patterns of speech common in a conversational style. The main objective is to develop fluency in speaking and ease in understanding. *Prerequisite: LS 104 or the equivalent.*

LS 201 READINGS IN HISPANIC LITERATURE (3) Selected readings on an intermediate level of difficulty to develop reading skills and increase vocabulary. An introduction to various literary forms and styles and the vocabulary necessary for literary analysis. *Prerequisite: LS 104 or the equivalent.*

LS 202 PHONETICS (3) The formations and the discrimination of the sounds of standard Spanish will be explained and practiced in class and in the laboratory. Patterns of stress, pitch, intonation and linking will also be practiced. *Prerequisite: LS 104 or the equivalent.*

LS 203 SPANISH CIVILIZATION (3) An examination of the forces, conflicts and beliefs which have shaped Spanish culture. Special attention to major works in the visual arts, music and literature which embody the artistic achievements of Spanish civilization. Oral and reading competence in Spanish is required. *Prerequisite: LS 104 or the equivalent.*

LS 204 SPANISH-AMERICAN CIVILIZATION (3) An examination of the culture of Spanish America in both pre-columbian and modern times. Emphasis on the diversity of Hispanic cultures in America and the artistic achievements of Spanish-American civilization. Special attention to Mexico, Puerto Rico and contemporary issues in the Hispanic world. *Prerequisite: LS 104 or the equivalent.*

LS 205 SPANISH COMPOSITION (3) An opportunity to develop your own style in writing by putting words and sentences together in accordance with the rules of Spanish grammar and rhetoric. The student will practice sentence patterns of differing length and complexity. Stress will be placed on the solution of specific problems of Spanish composition. *Prerequisite: LS 104 or the equivalent.*

LS 206 ADVANCED ORAL SPANISH (3) Intensive practice in speaking in a variety of formal and informal situations so that the student will gain self-confidence in expressing personal ideas in Spanish. *Prerequisite: LS 200 or the equivalent.*

LS 300 SPANISH LITERATURE I (survey) (3) A survey of Peninsular literature from the medieval era to the end of the Eighteenth Century; a critical analysis of selected works by the leading literary figures. *Prerequisite: LS 201 or the equivalent.*

LS 301 SPANISH LITERATURE II (survey) (3) A survey of Pensular literature of the Nineteenth and Twentieth Centuries; a critical analysis of selected works by the leading literary figures. *Prerequisite: LS 201 or the equivalent.*

LS 302 MEDIEVAL AND RENAISSANCE LITERATURE (3) An examination of the most representative literary works from the medieval era through the Renaissance. *Prerequisite: LS 300 or the equivalent.*

LS 303 GOLDEN AGE (3) A study of Spanish literature from the late Sixteenth Century to the Baroque era. *Prerequisite: LS 300 or the equivalent.*

LS 304 CERVANTES (3) An in-depth study of *Don Quixote* and major critical approaches to this work. *Prerequisite: LS 300 or the equivalent.*

LS 305 ROMANTICISM AND REALISM (3) An examination of Spanish literature in the Nineteenth Century through the works of the most representative literary figures. *Prerequisite: LS 301 or the equivalent.*

LS 306 CONTEMPORARY PENINSULAR LITERATURE (3) A study of Spanish literature from the generation of 1898 to the present. *Prerequisite: LS 301 or the equivalent.*

LS 307 SPANISH-AMERICAN LITERATURE I (survey) (3) A survey of Spanish-American literature from the colonial period to Ruben Dario; a critical analysis of selected works by the leading literary figures. *Prerequisite: LS 201 or the equivalent.*

LS 308 SPANISH-AMERICAN LITERATURE II (survey) (3) A survey of Spanish-American literature from Ruben Dario to the present; a critical analysis of selected works by the leading literary figures. *Prerequisite: LS 201 or the equivalent.*

LS 399 INDEPENDENT STUDY (3) A course offered by special arrangement to the student interested in studying a specific aspect of Spanish literature. A reading knowledge of Spanish is essential. *Prerequisite: LS 300, LS 301, LS 307 or LS 308 or the equivalent.*

GEOGRAPHY AND REGIONAL PLANNING

Chair, Karl K. Leiker

William D. Bennett, Anthony Bonacquisti, Stephanie B. Kelly, Thomas L. Millette, George Psychas, David E. Vincent

Students in Geography and Regional Planning are given a strong background in methodology, including the use of statistical and mathematical methods for data analysis, skills in the interpretation of data from aerial and satellite photos for land use and resource study, and computer use for map production, site location, transportation network analysis, and Geographic Information Systems (GIS). Students may take geography and regional planning courses as electives, or to fulfill the requirements for the minor or the Bachelor of Science in Regional planning.

The Geography and Regional Planning Department has a cartography and remote sensing (aerial and satellite photo analysis) laboratory which also contains facilities for laboratories in physical geography. The department's computer mapping equipment includes a Tektronix 4662 Pen Plotter linked with a Tektronix 4006-1 graphics terminal; additional graphics terminals are maintained by the college's computer center. The CDC Cyber mainframe library in Boston makes available software packages for computer graphics and also provides statistical packages for data analysis, including the CENSPAC software for use with the 1980 U.S. Census. The department also holds on file other software for location and transportation network analysis. A new microcomputer lab is dedicated to Digital Image Processing and Geographic information systems research and instruction.

Geographers and regional planners enter a variety of career areas. Urban and regional planning graduates often work for city, county, or regional planning agencies; others are hired by consulting firms, larger private businesses and banks, or real estate firms involved in land development and planning. Environmental planning graduates work in air, land and water management and pollution control; many are involved in the preparation of Environmental Impact Statements and similar issues.

REQUIREMENTS FOR REGIONAL PLANNING MAJORS

A. Regional Planning Shared Core (9 hours required)

GP 105 Introduction of Urban and Regional Planning
GP 106 Introduction to Environmental Analysis
GP 390 Seminar

B. Regional Planning Methodology (9 hours; any three courses)

CJ 331 Research Methods in Criminal Justice
CS 117 Introduction of Computer Programming
EN 347 Advanced Writing Techniques
GP 241 Introductory Cartography
GP 243 Aerial Photo Interpretation
GP 242 Computer Mapping
GP 340 SPSS: Statistical Package for Social Scientists
GP 240 Spatial Analysis
GP 314 Transportation Geography
SO 330 Demographic Techniques
GP 343 Remote Sensing

C. Regional Planning Emphasis (9 hours within one chosen track)

Urban and Regional Track

EC 304 Economics of Urban Development
GP 350 Internship in Urban/Regional Analysis
GP 219 Land Use and Resource Planning
HI 345 Contemporary American City
HI 348 History of City/Regional Planning

Environmental Track

BI 201 General Ecology
BI 316-317 Urban Ecology
BI 233 Environmental Legislation

BI 317 Architecture and Environment
GE 208 Behavioral Geography (Environmental Cognition)
RP 351 Internship in Environmental Analysis

D. Regional Planning Electives (9 hours: with advisement, any three courses including any courses not taken but desired from B or C)

BI 202 Conservation
CJ 206 Crime and the City
EC 215 Public Finance
EC 301 State and Local Finance
GP 215 Economic Geography
GP 217 Planning Issues of the Future
GP 211 Population Geography
GP 315 Industrial and Business Location
HI 344 The City in American History
PL 204 Introduction to Public Administration
PL 205 Urban Politics
PY 200 Industrial Psychology
PY 304 Social Psychology
SO 305 Urban Sociology
GP 399 Independent Study

The Regional Planning Minor

The minor in Regional Planning is tailored to the particular requirements of the student in the Regional Planning program. The minor requires a total of 18 semester hours of coursework, including GP 105 and GP 106, any one course listed in the methodology section, and any three courses listed in either track of the RP emphases.

The Geography Minors

The Geography and Regional Planning Department offers two minors in Geography: one in the Cultural-Regional area of geography, and the other in Applied Geography. The Cultural-Regional emphasis is for those students in the liberal arts majors (e.g., history, etc.) or those who wish to specialize in a particular region of the world (e.g., Africa, etc.). The Applied Geography minor is oriented toward those students opting for career areas in applied geography (e.g., site location analysis, etc.). The latter geography minor is particularly suited to students majoring in Business, Economics, Criminal Justice, Political Science and other similar areas.

A total of 18 semester hours is required for a minor in either of the two tracks. Principles of Geography is required for either track. Beyond this requirement, the specific courses are chosen by advisement from the choices listed within each track.

APPLIED GEOGRAPHY

Principles of Geography (3)
Urban and Regional Planning (3)
Spatial Analysis (3)
Physical Geography and Lab (4)
Cartography (3)
Computer Mapping (3)
Economic Geography (3)
Urban Geography (3)
Transportation Geography (3)
Remote Sensing (3)
Behavioral Geography (3)
Meteorology or Climatology (3)
Travel and Tourism (3)
Geomorphology (3)
Statistical Package for Social Scientists (3)

CULTURAL-REGIONAL GEOGRAPHY

Principles of Geography (3)
Geography of Anglo-America (3)
Behavioral Geography (3)
Physical Geography and Lab (4)
Cultural Geography (3)
Political Geography (3)
Geography of Europe (3)
Geography of Africa (3)
Geography of North America (3)
Cartography (3)
Climatology (3)

Cartography Concentration and Minor

Cartography is the part of geography that deals with the theory, design, and production of maps. The Cartography concentration/minor is a set of courses designed for students who wish to pursue a career in this field.

In order to help students meet federal guidelines for an entry level cartographer, the following courses are required of students seeking a concentration or minor in cartography at Westfield State College:

Prerequisites for Admission to the Cartography Concentration Program (6 hours)

GP 101 Principles of Geography or GP 102 Physical Geography	3 hours
MA 103 Pre-calculus Math I	3 hours
MA 104 Pre-calculus Math II*	3 hours

*Calculus is suggested for students planning graduate work in cartography.

Required Courses in Cartography Concentration/Minor (18 hours)

GP 241 Introduction to Cartography	3 hours
GP 341 Advanced Cartography	3 hours
GP 242 Computer Mapping	3 hours
GP 243 Aerial Photo Interpretation	3 hours
GP 340 Statistical Package for the Social Sciences	3 hours
GP 343 Remote Sensing	3 hours
FA 206 Lettering and Layout	3 hours

GEOGRAPHY AND REGIONAL PLANNING CURRICULUM

GP 101 PRINCIPLES OF GEOGRAPHY (3) An introductory course which introduces the student to the scientific principles of geography, including spatial organization, spatial diffusion, Central Place Theory, urban landuse and human-environment interaction. Students also learn to interpret maps and do exercises in a variety of modern geographic topics such as migration, site location and computer mapping.

GP 102 PHYSICAL GEOGRAPHY (3) Analysis, through a conceptual approach of regional landform development, climatic patterns, vegetation distributions, soil groupings and factors influencing the location of major economic minerals. The man-land relationship will be emphasized. Extensive use of maps.

GP 103 A PHYSICAL GEOGRAPHY LABORATORY (1) An optional laboratory session correlated with GE 102 Physical Geography. Conduct of this course will include field study and laboratory techniques. Map and aerial photographic interpretation skills will be emphasized. *Prerequisite: Concurrent enrollment or previous enrollment in GP 102.*

GP 105 INTRODUCTION TO URBAN AND REGIONAL ANALYSIS (3) Deals with the birth, evolution and futures of cities and urban regions. Specific topics include zoning practices, taxation, government programs, urban renewal and revitalization, comprehensive master planning and urban aesthetics.

GP 200 GEOGRAPHY OF EUROPE (3) A regional geographic study of physical, economic, cultural and political patterns of Europe. Population patterns will be evaluated via sequent occupance studies. Assets and liabilities of individual states will be evaluated and discussed in an attempt to promote a better appreciation of the geographic structure of Europe.

GP 201 GEOGRAPHY OF AFRICA (3) A regional, physical and cultural geographic survey of Africa. A study of the distribution of land and people, physical environment, resources, settlement, and economic development. Special emphasis will be given to cultural elements. A geographic interpretation of the political and economic problems of emerging African States will be considered. *Prerequisite: GP 101.*

GP 202 GEOGRAPHY OF ANGLO-AMERICA (3) A physical and cultural survey of Anglo-America. A geographic interpretation of the settlement, resource development and problems of Anglo-America.

GP 210 CULTURAL GEOGRAPHY (3) An analysis of the man-land relationship as evidenced in the variety of culture worlds that exist. Special emphasis on growth of the population as well as the invention and diffusion of ideas.

GP 211 POPULATION GEOGRAPHY (3) Discusses the spatial distribution of the three major demographic variables, fertility, mortality and migration. Attention also given to US migration trends, the demographic transition, world economic development, geography of disease and the use of certain demographic techniques (e.g., population projections, etc.).

GP 212 POLITICAL GEOGRAPHY (3) 1. International disputes over boundaries and resources, including internal conflicts over water rights. 2. The Law of the sea. 3. Political manipulation of space (e.g., Gerrymandering, "redlining," redistricting, etc.). and 4. Electoral politics; geographic expression of voting patterns on a national, regional, state and urban level.

GP 213 TRAVEL AND TOURISM (3) Surveys major world tourist areas, the role of the physical environment in tourism and recreation, trip planning, travel agency operations and recreational planning.

GP 214 BEHAVIORAL GEOGRAPHY (3) Behavioral geography focuses on the relationship (or interaction) between the geographic environment and human spatial behavior. The major theme is the study of the individual behavioral processes which give rise to spatial distributions on land. Some major topics of the course include: cognitive behaviorism, how one's mental images of the environment influence spatial behavior; cognitive mapping, a study of how man orients himself in geographic space in order to implement decisions and behavior (e.g., navigating in urban space); the environmental evaluation of prereference framework (e.g., studies of preferences or evaluations of certain types of climates or landscapes, place preferences); models of spatial decision making (e.g., migration decisions, location of human activities, etc.); man versus environment studies (hazard perception) personal space; and the affective bond between people and places. *Prerequisite: sophomore standing.*

GP 215 ECONOMIC GEOGRAPHY (3) An analysis of basic economic activities and the ways in which environmental factors affect them. Major emphasis is given to the differences between economies of abundance and economies of scarcity, with special emphasis on present world resource problems. This course may be taken as part of the requirements for Economic majors with the permission of both departments.

GP 216 URBAN GEOGRAPHY (3) A study of the urban setting through a geographical analysis of its social, economic, demographic, political and environmental problems. The structure of the course will allow the student to conduct independent research in areas where his/her main interests lie. Independent research will be prefaced with a short history of the origin, growth development and spread of urbanism. *Prerequisite: permission of instructor.*

GP 217 GLOBAL ISSUES OF THE FUTURE (3) Addresses a variety of conditions, problematical issues, and potential solutions confronting global society as we close in on the 21st century. Specific topics to be discussed include future shock, the consequences of a "shrinking" world, urbanization and world cities, trans-national corporations, alternative and exotic energy sources, environmental quality, resource scarcities, geopolitical developments, space control and colonization, and emergent lifestyles. *Prerequisite: Sophomore standing.*

GP 230 METEOROLOGY (3) A nonmathematical introduction to weather science. Students are introduced to the basic elements of weather: earth-sun relations, temperature, winds and atmospheric pressure, humidity and precipitation, air masses, fronts, cyclogenesis, weather forecasting and storms. Students are also acquainted with the use of weather instruments.

GP 106 INTRODUCTION TO ENVIRONMENTAL ANALYSIS (3) Introduces the interface of the human and natural environmental systems. Topics include air and water pollution, forest and wildlife preservation, risk assessments of floods and other hazards, urban climatology and various techniques of environmental assessment.

GP 240 SPATIAL ANALYSIS (3) An introduction to the use of quantitative methods in the analysis of spatial distributions.

GP 241 INTRODUCTORY CARTOGRAPHY (3) A laboratory course which is designed to survey the field of cartography. An analysis is made of early map projections and the evolution of modern mapping techniques. Map intelligence, maps, and aerial photo interpretation will constitute a significant portion of the course. Emphasis will be given to the interpretation of data spatially. Each student will be introduced to the cartographic process and participate in the design, production and reproduction of various graphics.

GP 242 COMPUTER MAPPING (3) Student is introduced to the use of computer in automatic mapping operations, including the computer line printer, pen plotter and CRT. The basic computer mapping software packages are introduced: SYMAP and CALFORM. Student also learns map digitation processes. No computer programming knowledge is required for the course.

GP 243 INTRODUCTION TO AERIAL PHOTO INTERPRETATION (3) Introduces students to the interpretation of air photos and satellite data, particularly the LANDSAT earth resources satellite. Students are taught the use of stereoscopes and other remote sensing techniques, as well as some acquaintance with photogrammetry.

GP 301 SEMINAR IN REGIONAL AND ENVIRONMENTAL PLANNING (3)

GP 305 REGIONAL GEOGRAPHY OF NEW ENGLAND (3) A study of the various physical features of New England: forms, climate, soil and vegetation, with an emphasis on natural resources and manufacturing.

GP 308 CULTURAL GEOGRAPHY OF EUROPE (3-6) A variable credit course for those students doing cultural geography fieldwork in Europe.

GP 314 TRANSPORTATION GEOGRAPHY (3) Deals with the evolution, significance, and underlying geographic principles of transportation, the theoretical bases of interaction,and the techniques of network analysis. The format of the course will allow the student to conduct independent research in the areas of interest. A significant portion of the course will introduce the student to computer-assisted techniques for transportation system analysis, although no student experience with computer operation is assumed. *Prerequisite: GP 101.*

GP 330 CLIMATOLOGY (3) A study of the processes and patterns of the world's climates. After a review of basic meteorology, the Koppen and Thorthwaite Classification systems are discussed. The final portion of the course investigates applied climatology which includes: human biometeorology (climate and humans), agriculture climatology, climates past and future and the effect of climate on transportation, architecture, business and the construction industry. *Prerequisite: GP 230.*

GP 331 SEVERE AND UNUSUAL WEATHER (3) Introduces students to the meterorological conditions associated with the formation of severe weather conditions, and examines the impact of hostile weather on human activities. Lectures focus on the Jet Stream and its role in the genesis of cyclones, blizzards, severe thunderstorms, lightning, hail, tornadoes, hurricanes, floods, droughts, cold and heat waves and bizarre weather phenomena such as dust devils, Chinooks, Haboobs, Santa Anas and mountainadoes. Also included are laboratory demonstrations of tornadoes and hurricanes.

GP 332 GEOMORPHOLOGY (3) An analysis of various processes of landform development, with emphasis on the delimitation of landform regions. *Prerequisite: GP 102.*

GP 340 STATISTICAL PACKAGE FOR SOCIAL SCIENTISTS (SPSS) (3) This course exposes students to the variety of statistical routines available in the widely-used *Statistical Package for Social Sciences (SPSS).* Classtime divided between lectures and application of statistical methods in SPSS program. Emphasis is placed upon a series of computer laboratory exercises, including frequency distributions, crosstabs, regression and correlation, Chi-Square, T-Test and others. No prior computer programming knowledge required.

GP 341 ADVANCED CARTOGRAPHY (3) Advanced principles of cartographic design and map reproduction. Coverage of topics such as map projections, landform representation, reproduction processes and advanced principles of thematic mapping. *Prerequisite: GP 241.*

GP 343 REMOTE SENSING (3) Provides students with an introduction to the application of remote sensing techniques for the inventory and analysis of earth resources. Included are treatments of exotic sensors, electromagnetic energy physics and data processing for digital classification techniques.

GP 350 INTERNSHIP IN REGIONAL AND ENVIRONMENTAL PLANNING (3-12)

GP 390 SEMINAR IN GEOGRAPHY (3) This seminar will be conducted by members of the Geography Department and will include guest lectures. It will focus on geographic methods, the interdisciplinary nature of geography, methods of inquiry and present trends.

GP 399 INDEPENDENT STUDY (3-6)

HEALTH, PHYSICAL EDUCATION, RECREATION AND DANCE

Chair, Larry French

Tilia Fantasia, Gerard Gravel, John Kurty, David Laing, Amelia Riou, Martha vanAllen, Carol Vermillion, Carmela L. Virgilio

Physical Education is concerned with the mechanics of human movement, the way this ability is used, and how this ability relates to other aspects of human functioning. The study of exercise, sports, games, gymnastics, and dance enriches the understanding of biological development, psychomotor learning, personal expression, applied mechanics, and related social factors.

Facilities available to students of Physical Education at Westfield State include an athletic field with track, and synthetic turf; a six-lane swimming pool with one- and three-meter springboards; a dance room; athletic training room; tennis courts; and gymnasium.

Seniors majoring in Physical Education may enroll in a practicum which involves student teaching or field work.

Graduates of this program are currently employed in public and private education, recreation facilities, corporate fitness programs, sports medicine, professional sports, and the sporting goods industry.

REQUIREMENTS FOR PHYSICAL EDUCATION MAJORS

BI 237	Anatomy and Physiology I	3 s.h.
BI 239	Anatomy and Physiology II	3 s.h.
PE 101	Intro to Physical Ed.	3 s.h.
HE 101	Standard First Aid and Personal Safety	1 s.h.
HE 201	Instr First Aid and Personal Safety	1 s.h.
PE 202	Intro to Motor Learning	3 s.h.
PE 205	Physiology of Exercise	3 s.h.
PE 204	Kinesiology	3 s.h.
PE 207	Care and Prevention of Athletic Injuries	3 s.h.
PE 302	Measurement and Eval. of Physical Education	3 s.h.
PE 311	Corrective and Adaptive Physical Education	3 s.h.
PE 313 OR	Methods/Materials I — Elem	3 s.h.
PE 314	Methods/Materials I — Sec.	
		32 s.h.
	Activities	
PE 176	Games I	2 s.h.
PE 177	Games II	2 s.h.
PE 175	Aquatics for Phys. Educator	1 s.h.
PE 178	Dance for Physical Educator	1 s.h.
PE 179	Racquet Sports for Physical Education	1 s.h.
PE 174	Team Sports for Physical Educator	2 s.h.
PE 151	Track and Field	1 s.h.
PE 156	Gymnastics	1 s.h.
		11 s.h.

Additional requirements for Teacher Certification in Physical Education:

PY 301 or 302	Child Psychology or Adolescent Psychology	3 s.h.
PE 316	Program Planning and Implementation	3 s.h.
PE 349 or 350	Practicum (K-9 or 5-12)	12 s.h.
PE 355	Practicum Seminar	

ADVANCED STANDING REQUIREMENTS

In order to achieve Advanced Standing, the student must present evidence of satisfactory progress towards the competencies defined below:

A. Academic Record

(a) At the completion of 60 hours, the student must have achieved a quality point average of 2.0.
(b) At the completion of the 23 semester hours listed below the student must have achieved in these courses a quality point average of 2.75.

INTRODUCTION TO PHYSICAL EDUCATION (3)
KINESIOLOGY (3)
INTRODUCTION TO MOTOR LEARNING (3)
CORRECTIVE AND ADAPTIVE PHYSICAL EDUCATION (3)
CARE AND PREVENTION OF ATHLETIC INJURY (3)
EIGHT SEMESTER HOURS IN REQUIRED ACTIVITIES

B. Student Self-Assessment

All students at the time of requesting "Advanced Standing" must present for consideration a self-evaluation. See advisor.

C. Faculty Recommendations

To be granted "Advanced Standing," students must be recommended by a "majority" of the Physical Education Department faculty.

COURSES

PE 101 INTRODUCTION TO PHYSICAL EDUCATION (3) Introduction to the history, objectives, literature and organization of the physical education profession, discussions of responsibilities and opportunities of professional personnel. Field Work required.

PE 199 WILDERNESS EXPERIENCES (3) An introduction to wilderness activities which provide participants with a degree of challenge and excitement. Will include current information on the most popular activities, with attention given to the history, equipment needs, travel arrangements, safety and first aid procedures, physical skills, liability problems and environmental concerns. The theories behind these activities and the organizational methods for conducting them, will also be included.

PE 202 INTRODUCTION TO MOTOR LEARNING (3) The study of significant variables which influence motor learning, i.e., transfer, cues, practice, reminiscences, perception, reaction time, motivation, reinforcement, etc. and the analysis of selective variables which affect the acquisition of motor skills. *Prerequisite: BI 113.*

PE 204 KINESIOLOGY (3) Science of human motion, analysis of leverage in body movement and problems of readjustment in relationship to body mechanics and to physical activity as it is related to an understanding of skillful, efficient and purposeful human motion. *Prerequisite: BI 113.*

PE 205 PHYSIOLOGY OF EXERCISE (3) Study of the immediate and long range effects of exercise upon the human body. Emphasis on the circulatory and respiratory systems, training, scientific foundations of physical fitness, survey of related research. *Prerequisite: BI 113.*

PE 221 PHYSIOLOGY OF FITNESS FOR BUSINESS AND INDUSTRY (3) Designed for the analysis of physiological principles and the prescription of exercise for fitness, weight control and health, this course is intended to provide a deeper understanding of fitness programs for individuals and/or groups in business and industrial settings.

PE 230 SPORTS MEDICINE I (3) A basic course devoted to the treatment of athletic injuries through manual, mechanical, and ice massage; strapping, therapeutic devices; rehabilitation of injuries; and to the legal and moral responsibilities of the trainer. Two lectures, one laboratory period weekly. *Prerequisite: BI 237, 239, PE 204.*

PE 301 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (3) Philosophy, program planning and methods of teaching children, guided observational experiences of children in schools, presentation of activities suitable in elementary school programs.

PE 302 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION The student will explore the concepts of assessing cognitive, affective and effective learning, emphasizing the latter (acquisition of motor skills) in terms of course objectives. Students will be expected to develop a working knowledge of elementary statistical methods essential to constructing, selecting and administering instruments applicable to physical education, and interpreting the results obtained.

PE 304 PSYCHOLOGY OF COACHING (3) This course concentrates on the principles and techniques applicable to the coaching of sports at the elementary and secondary levels.

PE 305 METHODS OF CONDITIONING IN ATHLETICS (3) Designed to acquaint the student with various physical conditioning programs for athletics. Methods of developing strength, speed, flexibility and cardiovascular endurance such as: isotonic and isometric strength training, interval training, circuit training and aerobics will be discussed. Also discussed will be factors pertaining to physical conditioning such as erogenic aids, diet and nutrition in athletics.

PE 307 PHYSICAL EDUCATION FOR THE SPECIAL CHILD (3) Deals with characteristics, needs and related problems of the special child associated with their integration into physical education programs. Special attention given to the emotionally disturbed, socially maladjusted, mentally retarded, physically handicapped, culturally deprived, and the gifted child. *Prerequisite: Special Education major or permission of instructor.*

PE 309 SPORTS MEDICINE II (3) The study of advanced techniques in the evaluation of and treatment of athletic injuries with special emphasis upon the theories and principles of tissue injury and repair. The course includes study of the principles of and the construction of programs for athletic fitness, protective and rehabilitative devices, and the underlying physics, physiological effects, and determination of proper care and use of advanced therapeutic modalities. *Prerequisite: PE 204, HE 210, PE 302 or written permission of instructor.*

PE 311 CORRECTIVE AND ADAPTIVE PHYSICAL EDUCATION (3) Examination techniques for recognition of atypical conditions, characteristics and problems of atypical selection and adaptation of physical activities to meet individual needs. *Prerequisite: PE 204.*

PE 312 MOVEMENT AND MUSIC WORKSHOP (3) Creative teaching in movement and music. Course will focus on movement principles and Orff-Schulwerk design for creativity in music. There will be application of the movement principles in Movement Education Program and the design for creativity in music toward the development of elemental experiences in music (sound), rhythm movement, and word. The culmination of activities will lead to the interdisciplinary application of movement, music and literature in the development of sensitivity of expressional media through the creative teacher. *Prerequisite: Junior or senior standing or consent of instructor.*

PE 313 METHODS AND MATERIALS OF TEACHING MOTOR ACTIVITIES — ELEMENTARY (3) Analysis of performance and methods of teaching selected motor activities for the elementary level. Included will be organization, sequencing and progression for teaching skills, fundamental motor patterns and game usage. Practicum experience required. *Prerequisite: PE 202.*

PE 314 METHODS AND MATERIALS OF TEACHING MOTOR ACTIVITIES — SECONDARY (3) Analysis of performance and methods of teaching selected motor activities. Will include drill formation, sequence and progression to teaching skills, in team and individual sports and other physical activities. Practicum experience required. *Prerequisite: PE 202.*

PE 315 PREVENTION AND CARE OF ATHLETIC INJURIES (3) This course will provide the student with knowledge of the general principles of athletic training. The emphasis of the course will be the prevention and management of sport injuries and conditions.

PE 316 PROGRAM PLANNING AND IMPLEMENTATION (3) Overview of the organizational structure of public schools, the administrative tasks of the physical educator, and the variety of curricular formats offered within the physical education setting. *Prerequisites: PE 313 or 314.*

PE 317 METHODS AND MATERIALS II — ELEMENTARY (3) Students will be involved in experiences with children from public schools in teaching and learning experiences. Students are required to become actively involved in assuming the roles and responsibilities of a professional educator. *Prerequisite: PE 313.*

PE 318 METHODS AND MATERIALS II — SECONDARY (3) Students will be involved in experiences with children from public schools in teaching and learning experiences. Students are required to become actively involved in assuming the roles and responsibilities of a professional educator. *Prerequisite: PE 314.*

PE 321 SUPERVISING SPORTS PROGRAMS (3) An overview of the objectives, strategies and policies regarding the management of sports programs. Specific learning experiences — such as supervision of staff and clients, decision making and planning, goal setting and performance, time management, resolution of conflict, financial considerations and budget preparation, design and maintenance of facilities, selection and maintenance of equipment, legal considerations and public relations — will be designed to enhance the individual's technical, human, and conceptual skills.

PE 322 SPORTS AND THE LAW (3) An analysis of the legal considerations in the administration of physical education, health, and sports/athletic programs. Specific law relevant to these programs and how to incorporate consideration of the law into instruction, curriculum development, supervision, staffing, policy formulation, facility design and maintenance, equipment selection and maintenance will be examined.

PE 350 STUDENT TEACHING IN PHYSICAL EDUCATION (12) Supervised observation and student teaching in an elementary and/or secondary school, conduct of classes and extracurricular activities, development and understanding of school and community. Emphasis on continuity of lessons, units, daily evaluation. Supervision by cooperating school and Physical Education faculty from the college. Individual conferences and group seminars. *Prerequisite: Advanced Standing, PE 317 or 318.*

PE 351 FIELD WORK (6-12) Provides Physical Education majors with opportunity to do inservice work with public and private agencies in the community. The students will work under the supervision of the agency director and will be supervised by a faculty member from the Physical Education Department. Students will be expected to assist in the development as well as conduct of various physical education programs offered at these agencies. *Prerequisite: Physical Education Major with Advanced Standing.*

PE 353 CLINICAL EXPERIENCE IN ATHLETIC TRAINING (6-12) Course requires working with a certified athletic trainer in another school for practical experience. Duties to include: administering first aid, administration of therapy treatment, observation of work of the clinical supervisor and duties assigned by the clinical supervisor. *Prerequisite: Permission of the instructor.*

PE 354 MOTOR DEVELOPMENT: TECHNIQUES AND APPLICATIONS (3) This course will provide the student with the knowledge and skills necessary for the identification and remediation of motor handicaps. The main emphasis will be on the techniques and materials used in a Motor Development Program. Special attention will be given to the impact of recent federal and state regulations and the relationship of motor performance to classroom learning.

PE 355 PRACTICUM SEMINAR/PHYSICAL EDUCATION (3) The practicum seminar is a series of formal meetings to provide an opportunity for student teachers to perceive relationships among ideas in problem situations, to explore creative situations, to increase familiarity with many resources and materials, and to develop wholesome personal and professional relationships. Special programs are presented with the aid of professional resource persons. Identification of educational innovations, problems and suggestions for the present and future needs of students and school personnel are a pertinent part of the practicum experience.

PE 399 INDEPENDENT STUDY (3-6) Individual research and independent study related to a particular phase of Physical Education with approval from the Physical Education Department. *Prerequisite: Physical Education Major with Advanced Standing.*

HEALTH

HE 100 HEALTH-RELATED FITNESS FOR ADULTS (3) Designed to assist the individual in making sound choices toward preparing and planning a lifestyle conducive to achieving and maintaining total fitness and well-being. Topics include: cariovasular endurance, muscle strength, muscle endurance, flexibility, diet and weight control, stress management and degenerative disease prevention. Combines the theoretical with the experimental.

HE 101 STANDARD FIRST AID AND PERSONAL SAFETY (1) Provides the fundamental principles, knowledge and skills of first aid and accident prevention. It prepares the average person to care for most injuries and emergencies when medical assistance is delayed. American Red Cross certification available.

HE 102 NUTRITION AND FOOD (2) Will include the study of basic principles of nutrition and how the body uses food. Students will be expected to understand recommended daily food allowance and to evaluate individual's habits. The role of vitamins, minerals, fluids, pre-event meals will be discussed.

HE 103 FOUNDATIONS OF HEALTH (3) Study of the basic health problems of college students. Discussions and investigations of current health problems such as drugs, alcohol, smoking, VD and emotional health.

HE 201 STANDARD FIRST AID AND PERSONAL SAFETY INSTRUCTOR'S COURSE (1) Methods and materials of teaching. Standard First Aid and Personal Safety. Includes organization, classroom management, lesson planning, testing and evaluation. ANRC instructor's certification available upon successful completion of all requirements. *Prerequisite: Current Standard First Aid and Personal Safety Certification. Prerequisite: HE 101 or PE 207.*

HE 202 COMMUNITY AND SCHOOL HEALTH (2) Develops an understanding of the meaning of health education. Discusses the teacher's role in the school health program, and the ways in which the teacher may work with and gain help from health personnel in the school and community. *Prerequisite: HE 103.*

HE 301 HEALTH EDUCATION IN THE ELEMENTARY SCHOOL (3) Designed to assist administrators and classroom teachers in evaluating needs of the particular school system and to formulate programs in health education. Emphasis will be on correlation and integration of health instruction. *Prerequisite: HE 103 or consent of the instructor.*

HE 302 ADVANCED FIRST AID AND EMERGENCY CARE (3) Covers skills and knowledge needed by persons who are likely to give First Aid frequently and will more than likely be responsible for some transportation when medical assistance will be delayed. American Red Cross Certification available.

HE 303 METHODS AND MATERIALS IN HEALTH INSTRUCTION (3) Deals with the most effective methods, procedures and techniques in teaching health. Instructional and curricular materials will be presented along with techniques and current methodology. Sources of materials and agencies which provide assistance will be included. *Prerequisite: HE 103 or consent of the instructor.*

RECREATION

RE 101 RECREATIONAL SKILLS (3) A survey of the skills and teaching techniques of a wide variety of sports and games, arts and crafts, drama and literature, music and social activities.

RE 102 INTRODUCTION TO RECREATION AND LEISURE (3) Introduction to the basic concepts, present status of recreation. Overview of the history of the Recreation Movement and its basic philosophy. Field work to be included.

RE 201 TECHNIQUES OF RECREATIONAL LEADERSHIP (2) The theory and practice of leadership techniques specifically applied to the organizing and implementation of recreational activities. *Prerequisite: RE 102.*

RE 301 OUTDOOR RECREATION (3) An in-depth analysis of outdoor recreational activities. Includes skills of living in nature in respect to wilderness camping and environmental awareness, campcraft skills; planning and conducting outdoor recreation programs. *Prerequisite: RE 102, RE 201.*

RE 320 ORGANIZATION AND ADMINISTRATION OF RECREATION (3) The course will cover many aspects of recreation: recreation services, factors supporting recreation today, the philosophy of recreation service, the administrative processes-theory and practice along with administration approaches to structure. Also includes the organization of programs, a study of recent laws, major recreation agencies, parks, municipal programs, functions, and management. *Prerequisite: Techniques of Recreational Leadership, RE 201, RE 301 Outdoor Recreation (3) and 5 activities (lifetime sports).*

OFFICIATING COURSES

PE 121 OFFICIATING MEN'S SOCCER (1)
PE 123 OFFICIATING SOFTBALL (1)
PE 125 OFFICIATING WOMEN'S BASKETBALL (1)
PE 126 OFFICIATING MEN'S BASKETBALL (1)
PE 128 OFFICIATING VOLLEYBALL (1)
PE 130 OFFICIATING FIELD HOCKEY (1)
PE 167 OFFICIATING MEN'S BASEBALL (1)

COACHING COURSES

Prerequisite varsity experience, or skills course in the activity.
PE 209 COACHING VOLLEYBALL (1)
PE 210 COACHING TRACK AND FIELD — CROSS COUNTRY (1)
PE 211 COACHING BASEBALL — SOFTBALL (1)
PE 212 COACHING BASKETBALL (1)

SKILLS

PE 110 ARCHERY (1)
PE 111 BADMINTON (1)
PE 114 FITNESS FOR ADULTS (1)
PE 115 BOWLING (1)
PE 120 SOCCER (1)
PE 122 SOFTBALL (1)
PE 124 BASKETBALL (1)
PE 126 OFFICIATING MEN'S BASKETBALL (1)
PE 127 VOLLEYBALL (1)
PE 129 FIELD HOCKEY (1)
PE 131 BEGINNERS' SWIMMING (1)
PE 132 INTERMEDIATE SWIMMING (1)
PE 133 SWIMMERS (1)
PE 134 SENIOR LIFE SAVING (1)
PE 140 SQUARE DANCING (1)
PE 141 FOLK DANCE (1)
PE 142 MODERN DANCE (1)
PE 143 BALLROOM DANCE (1)
PE 144 MODERN JAZZ (1)
PE 145 BALLET I (1)
PE 146 BALLET II (1)
PE 147 BASIC RHYTHMIC ACTIVITIES (1)
PE 148 TAP DANCE (1)
PE 149 TENNIS (1)
PE 150 TENNIS II (1)
PE 151 TRACK AND FIELD (1)
PE 152 GOLF I (1)
PE 153 GOLF II (1)
PE 154 SKIING I — DOWNHILL (1)
PE 155 SKI TOURING AND SNOW SHOEING (1)
PE 156 GYMNASTICS I (1)
PE 160 SELF DEFENSE I (1)
PE 161 SELF DEFENSE II (1)
PE 162 WEIGHT TRAINING AND CONDITIONING (1)
PE 164 BICYCLING (1)
PE 165 RACQUETBALL AND HANDBALL (1)
PE 167 CAMPING SKILLS (1)
PE 170 TOUCH FOOTBALL (1)
PE 171 CLIMBING (1)
PE 172 ORIENTEERING (1)
PE 173 INITIATIVE GAMES AND ROPES (1)
PE 174 TEAM SPORTS FOR THE PHYSICAL EDUCATOR (2)
PE 175 AQUATICS FOR THE PHYSICAL EDUCATOR (1)
PE 176 GAMES I (2)
PE 177 GAMES II (2)
PE 178 DANCE FOR THE PHYSICAL EDUCATOR (1)
PE 179 RACQUET SPORTS FOR THE PHYSICAL EDUCATOR (1)

ATHLETIC TRAINING COURSES

PE 230 SPORTS MEDICINE I (3)
PE 309 SPORTS MEDICINE II (3)
PE 353 CLINICAL EXPERIENCE IN ATHLETIC TRAINING (6-12)

HISTORY

Chair, Martin Kaufman

Michael S. Anciello, Robert L. Brady, Robert T. Brown, Frederick F. Harling, Lester T. Hutton, John W. Ifkovic, Michael F. Konig, Catherine B. Shannon, R. Frederick Twenter.

The major in History is structured to provide undergraduates with an understanding of the past as well as to teach skills enabling them to attack any sort of problem, to ask appropriate questions, to assemble valid evidence, and to arrive at rational conclusions. Given such training, the student majoring in History is prepared for graduate work in history or law, or to pursue careers in international business, communications, teaching, government service, museum administration, social work, and library science. The department also has a fully-accredited teacher-training program, administered in conjunction with the Department of Education.

An integral part of the department is the Institute for Massachusetts Studies, which publishes the *Historical Journal of Massachusetts* as well as books related to the history and culture of the region. The *Journal* draws important contributors and reviewers nationally, and has a circulation of well over one thousand, including university and college libraries in the United States and in several foreign countries. Students serve on a board of student editors, and outstanding student research papers are occasionally published.

The campus supports an active chapter of Phi Alpha Theta, the National Honor Society in History, and qualified students are inducted into the society in the junior or senior year.

Students are also offered a number of internship opportunities allied to the study of American History. These include museum work at Old Sturbridge Village, the Holyoke Museum, and the Connecticut Valley Historical Museum, and archival and library work at the Springfield City Library and the John Fitzgerald Kennedy Library in Boston.

HISTORY MAJOR REQUIREMENTS

I. Major core — 9 credits in 100-level History courses.
II. Major advanced program: In consultation with a department faculty adviser, students will define a field of concentration within one of three areas — European History, American History, or Non-Western (Africa, Asia, Latin America) History. The concentration will consist of 18 credits in one of the three areas listed above and will be supplemented by 12 credits in a different, but chronologically or topically related field, chosen from the two remaining areas.

Distribution of courses by level, concentration and allied area:

A. Core for major	
100-level courses	9 s. hrs. credit
B. Field of concentration	
200-level courses	12 s. hrs. credit
300-level courses	6 s. hrs. credit
minimum total	18 s. hrs. credit
C. Allied field	
200-level courses	9 s. hrs. credit
300-level courses	3 s. hrs. credit
minimum total	12 s. hrs. credit

Major in minimum total semester hours of credit — 39

Descriptions of fields within the three areas noted above may be obtained from the History Department.

A. EUROPEAN

HI 101 WESTERN EXPERIENCE I (3) A survey of pre-modern (pre-1500 A.D.) Western civilizations. Major topics include: the "classical" societies of ancient Greece and Rome, the rise of Christian civilization in Europe, and the nature of medieval society and culture.

HI 102 WESTERN EXPERIENCE II (3) A multidisciplinary approach to understanding the nature of modern (post-1500 A.D.) European civilization. Through lectures and discussions, students will explore demographic, sociological, political, and cultural elements of Europe's evolution from traditional to modern modes of activity and thought.

HI 201 MEDIEVAL EUROPE (3) The institutional, economic, and intellectual history of Europe as it emerged from its Roman and Germanic antecedents and developed into a distinctly western civilization. Emphasis will be placed upon the growth of medieval governmental institutions and the great intellectual achievement of the high middle ages.

HI 203 RENAISSANCE AND REFORMATION EUROPE (3) An examination of the "waning of the Middle Ages" and the "Dawn of a new era" in the light of recent historical research. The physical and psychological impact of the Black Death, the fascination with the classical past, the religious revolution and the possibility of individual creativity will be considered in the context of the scientific, social, and political assumptions of Europeans from the 14th through the 16th centuries. *Prerequisites: 3 credits in History or equivalent.*

HI 205 SEVENTEENTH CENTURY EUROPE, 1559-1715 (3) The 17th century began with political chaos, economic dislocation, religious passion, and endemic violence. The century ended with political stability, economic viability, toleration, and pervasive skepticism. The course will examine the nature of these changes, with particular attention to the physical and psychological impact of 17th century warfare, the nature of scientific inquiry, and the re-ordering of 17th century monarchies. *Prerequisites: 3 credits in History or equivalent.*

HI 207 18th CENTURY EUROPE (3) An examination of the development of this great age which launched Europe on the path of Revolution. Important political and intellectual antecedents will be discussed. This will be followed by a thorough study of the ideas, institutions and society of 18th century Europe, culminating in the French Revolution of 1789.

HI 209 19th CENTURY EUROPE (3) An examination of the effects of the combined forces of nationalism, revolution and the Industrial Revolution upon the fabric of European political, social, and economic institutions. Special consideration will be given to drives for national unity in Italy and Germany, and their effects upon the European balance of power prior to World War I.

HI 211 EUROPE SINCE 1919 (3) An examination of Europe's efforts to recover from the first World War, to work out the self-determination policy of the Versailles Treaty, to survive the great depression, and to resolve the conflicts which precipitated World War II. The course will also examine the post-war problems of the United Nations, the cold war, the end of Imperialism, the common market, and new regional pacts.

HI 216 THE FRENCH REVOLUTION (3) This course will deal with the upheaval that effectively destroyed the age-old European hierarchical society and laid the foundation for modern political systems. The problem of the impact of ideas, the role of economic dislocation and political disfunction as portents of revolution will be considered. Use will be made of the newer research into demography and crowd psychology as well as of the traditional literary and historical sources. *Prerequisites: 3 credits in History or equivalent.*

HI 223 WORLD WAR I: The "Real" War (3) War was expected — and planned for — in turn-of-the-century Europe. Almost no one, however, was prepared for the obscene by nature and in a dimension unparalleled in the previous history of modern Europe. An entire generation of young men — and "of the best among them" of each of the major powers of Europe — perished in the "Great" War as it is called by Europeans. The course will treat the causes, the course and the nature of the war. The impact of the war on contemporaries will be measured through biographical, autobiographical and other literary sources written by participants in, or close observers of, the war.

HI 225 LONDON AND PARIS, 1610-1870 (3) A study of the transition of two major European cities from walled towns defined by charters of liberties to metropolitan capitals. Two broad categories will be considered: first, the changing relationship between the town and the territorial state, with the disappearance of walls and the impact of population explosion; and second, the changing patterns of settlement within the town, the growth of slums, the effectiveness of city planning, and the interrelation of town organization, crowd psychology and political revolution. Recent studies of urban demography, labor patterns and city planning will be used, as well as maps, pictures, memoirs and novels. *Prerequisites: 3 credits in History or equivalent.*

HI 231 MODERN BRITAIN, 1738 to WORLD WAR II (3) Explores a number of significant themes in the historical experience of Modern Britain; viz, the evolution of the social welfare state, the political and environmental impact of the industrial revolution, urbanization and demographic change, the political and social democratization of British society, the rise to great power status and the subsequent decline of Britain, and the impact of post-war economic and political organization upon traditional British structures and values. *Prerequisite: HI 101, 102 and/or permission of the instructor.*

HI 235 MODERN IRELAND, 1783 TO PRESENT (3) The major theme of the course will revolve around the origins, development, character and tactics of the Irish nationalist movement. The seventeenth century confiscations, the American and French Revolutions, the Emancipation and Repeal movements, the Great Famine, the Home Rule agitation, and the Irish cultural renaissance which combined to create a militant Irish nationalism, culminating in the 1916 Rebellion, will be the major issues examined. Secondary themes will be the decisive role of the Irish Question in moulding British political and constitutional developments, the causes and significance of the recent violence in Northern Ireland, and the impact of the twentieth century modernization and the E.E.C. upon traditional Irish nationalism. *Prerequisite: HI 101, 102 and/or permission of the instructor.*

HI 239 HISTORY OF RUSSIA I (3) A survey of Russian civilization from its origins to the mid-nineteenth century. Major themes include: the rise of autocracy, serfdom, and empire, as well as the nature and achievements of Russian culture.

HI 240 HISTORY OF RUSSIA II (3) A survey of modern Russian civilization since 1881. Major themes include: the origins and consequences of the Russian revolutions, the nature of the Soviet system, the achievements of Russian and Soviet culture, and the US-USSR contest for world empire.

HI 300 PROBLEMS IN EUROPEAN HISTORY (3) Significant themes or issues in the evolving process of European Civilization examined in detail. May be taken three times for credit.

HI 305 ENGLAND AND AMERICA IN THE 17th CENTURY (3) Between 1620 and 1642, 58,000 Englishmen left home for the New World, despite its deserved reputation as a death trap. The course will examine in depth the motives — both in terms of protest and aspiration — of the emigrants, the impact upon them of the wilderness and the Indian, and the emergence of such specifically American institutions as the Puritan family, the town structure, and slavery. Discussion and independent research. *Prerequisites: 6 credits in History at the 200-level or equivalent.*

HI 309 THE COLLAPSE OF EUROPE, 1890-1922 (3) The period extending from 1890 to 1922 was witness to one of the most profound and sudden intellectual, cultural and political revolutions in the history of Western Europe. The Intellectual Revolution, taken together with World War I and the Russian Revolution, is often regarded as marking the end of an epoch in European history that started as early as the Renaissance and which took sharper form during the 18th-century Enlightenment. The course focuses attention on the thought of European intellectuals during the period, and on the varying consciousness among them, of a sense of profound cultural change. *Prerequisites: 6 credits in History at the 200-level or equivalent.*

HI 315 LIVING AND DYING IN EUROPE, 1610-1870 (3) The course presents an introduction to the patterns of everyday life of ordinary Europeans before and after the "vital revolution" of the 18th century: a revolution which marked the shift from recurrent mortalities to population explosion. The relationship between the exploitation of resources and population in terms of family life, economic distribution, political organization and popular psychology will be examined. Much of the material is recent and controversial. The course will be conducted by discussion and students will be expected to do a considerable amount of independent research. *Prerequisites: 6 credits in History at the 200-level or equivalent.*

HI 340 RUSSIA IN REVOLUTION 1900-1921 (3) A study in detail of the revolutionary experience of Russia: three "revolutions" and a civil war within twenty years. The student will study the causes and effects of violent change, the origins for the Soviet state (theory and practice) and the terminology and method of Soviet historiography.

B. AMERICAN

HI 130 UNITED STATES HISTORY AND GOVERNMENT (3) A survey of the United States history tracing the growth of American institutions and interpreting periods and events of important national significance. Consideration will be given to the causes and results of wars, presidential administrations, great issues and changes in governmental attitudes.

HI 251 AMERICAN COLONIAL HISTORY 1607-1763 (3) The political, economic, and social development of the American colonies; British colonial policy.

HI 253 THE ERA OF THE AMERICAN REVOLUTION 1763-1787 (3) Examines the social, political, economic, religious, and ideological factors which led to the Revolution and which gave it its character. Topics to be treated include: British Colonial policy and its effects; the American setting; the growth of an American identity; the road to Revolution; the "internal revolution"; and the United States under the Articles of Confederation.

HI 255 THE AGE OF JEFFERSON AND JACKSON, 1787-1845 (3) A study of the establishment of the federal system from the Constitutional Convention to the crisis in the union. Specific topics treated will include the emergence of political parties, Jeffersonian and Jacksonian democracy, Expansion and the War of 1812, and the emergence of sectionalism.

HI 257 THE CIVIL WAR AND RECONSTRUCTION, 1845-1877 (3) The causes of the War, the conduct of the war; the attempt at reconstruction in its political, social, and economic aspects; and national reunification.

HI 259 U.S.: RESPONSE TO INDUSTRIALISM, 1877-1920 (3) A topical examination of the impact of the Industrial Revolution and its chief consequences upon the mode and organization of American society with particular emphasis upon the rise of national reform and the emergence of the U.S. as a world power.

HI 261 THE TWENTIES AND THE GREAT DEPRESSION (3) An examination of the characteristics and problems of the Twenties, the New Deal response to the Great Depression, and the changes wrought by World War II to 1945.

HI 263 THE U.S. SINCE 1945 (3) An examination of the Cold War crisis through Vietnam and contemporary domestic problems post-1945: the rise and fall of the "Liberal State", Red Scare, Black Revolt, Counterculture, and Watergate.

HI 266 U.S. SOCIAL AND CULTURAL HISTORY I (3) An examination of American social and cultural developments from the early colonization to the Civil War. Topics to be studied include the religious history of colonial America, changing social and family life, entertainment, the impact of democracy and nationalism on American life, and the workers, north and south.

HI 267 U.S. SOCIAL AND CULTURAL HISTORY II (3) An examination of American social and cultural developments from the Civil War to the present, with projections for the future. Topics to be studied include industrialization, urbanization, immigration, changes in family and social relationships, religion, and a focus on women, Blacks, Indians, and minorities.

HI 268 THE CITY IN AMERICAN HISTORY (3) A study of the American city from colonial times to 1919. The course examines the impact of urbanization upon social and institutional structures. Topics include the rise of the city, transportation revolution, the impact of technology, industrialization, immigration, physical growth patterns, social mobility, reform, and the rise of city planning.

HI 269 THE CONTEMPORARY AMERICAN CITY (3) The American City since 1919 as studied through the forces that have shaped the contemporary city: the automobile, the highway revolution, metropolitan and megalopolis forms, ghettos, suburbanization, and city and regional planning. Particular emphasis will be given to the nationalization of the American City.

HI 270 PROBLEMS IN AMERICAN HISTORY (3) This course will offer readings and/or research in a specific pre-arranged topic in American history. Examples of the topics are sickness and health in American History, the Immigrant Experience, the Depression, etc. This course may be taken three times for credit.

HI 274 MASSACHUSETTS HISTORY TO 1820 (3) An examination of the history and society of Massachusetts from the period before the arrival of whites to 1820. Major topics to be covered include the Puritan experience, Indian-White relationships, the Revolutionary era, Massachusetts under the Articles of Confederation, the early development of industrialization, and the War of 1812 and its aftermath.

HI 275 MASSACHUSETTS HISTORY SINCE 1820 (3) An examination of the history and society of Massachusetts from the early 19th century to the present time. Major topics to be covered include immigration and its impact on Massachusetts, industrialization, urbanization and suburbanization, the cultural flowering of the 19th century, the Civil War, the changing environment and economy, and the impact of technological developments in the post-World War II period.

HI 350 SENIOR SEMINAR: EARLY AMERICAN HISTORY (3) An in-depth research and/or reading experience in early American history, building upon the student's background and interests. The course will include discussion, criticism by classmates, analysis by the instructor. *Prerequisite: two 200-level courses in the field or equivalent.*

HI 355 SENIOR SEMINAR: 19th CENTURY AMERICAN HISTORY (3) An in-depth research and/or reading experience in 19th century American history, building upon the student's background and interests. The course will include discussion, criticism by classmates, and analysis by the instructor. *Prerequisite: two 200-level courses in the field or the equivalent.*

HI 360 SENIOR SEMINAR: RECENT AMERICAN HISTORY (3) An in-depth research and/or reading experience in recent American history, building upon the student's background and interests. The course will include discussion, criticism by classmates, and analysis by the instructor. *Prerequisite: two 200-level courses in the field or equivalent.*

HI 361 INTERNSHIPS IN AMERICAN HISTORY (1-15) A program centering on study and internship in various career fields allied to the study of American History. These may include museum work, historical restoration projects, local archeology, archival work, and historical editing (editing is limited to 1 credit per semester, a maximum of 3 credits may be earned). While gaining practical work experience through the internship program, the student will also be undertaking a directed research project associated with the area of internship. *Prerequisite: permission of director of internships.*

HI 365 THE HISTORY OF CITY AND REGIONAL PLANNING (3) The development of the urban planning profession in America is studied from the 1890's to date. The course will analyze planners' responses to rising problems of land use, zoning, housing, suburbanization, environmental problems, highways, strips, malls and the larger requirements of metropolitan and regional need created by the evolution of urban form and structure.

C. NON-WESTERN

HI 150 INTRODUCTION TO NON-WESTERN WORLD (3) Provides a brief survey of the essential elements of the history and culture of the peoples of Asia and Africa. Includes an analysis of the roles played by Buddhism, Confucianism, Hinduism and Islam in developing the unique characteristics of the non-west; and a summary of the major historical events of China, India and Africa, as well as a study of the relations of these countries with each other.

HI 276 THE SPANISH EMPIRE IN AMERICA (3) The course will examine the Spanish discovery and conquest of America from Columbus to the 19th-century revolutions for independence. Focal points will be the existence of the great Indian civilizations; the formation of Spain's American Empire; the Indian receptivity of Spanish culture; and the factors which contribute to the decline and fall of this most extensive of the European empires in the Western Hemisphere.

HI 277 LATIN AMERICAN NATIONS, 1825 TO THE PRESENT (3) The course focuses on the emergence of the Latin American countries, their common characteristics, their struggles for survival in the face of persistent dictatorships and military juntas, and the survival of colonial traditions which have both facilitated and impeded their development in the large community of nations.

HI 282 TRADITIONAL AFRICA TO 1807 (3) The history of Africa is to be surveyed from prehistoric times to 1807. Topics covered will include an introduction to the geography, peoples and culture of the continent. More specialized topics will include studies of pre-historic Africa, Africa and the classical world, formation and history of sudanic and savanna states, Bantu migrations, African states of the east coast, initial European contacts with continent, the slave trade and the beginnings of exploration.

HI 283 CONTEMPORARY AFRICAN HISTORY (3) The second half of the study of the history of Africa will be devoted to a survey of the period from the English and slave trade law of 1807 to the present. Topics covered will include the slave trade of the 19th century and its suppression, exploration of the continent, the impact of imperialism, the formation and administration of colonies, and the nationalist movements. There will be further specialized topics concerning modern Africa such as economic and political development, confrontation between the races, Africa in world affairs, and studies in depth of individual nations.

HI 286 TRADITIONAL FAR EAST (3) A study of the historical and cultural foundations of China, Korea, India, and Japan including their dynastic developments until the Eighteenth century.

HI 287 CONTEMPORARY FAR EAST (3) Western contacts with Asia beginning with the Eighteenth Century, emphasizing the Chinese world view in the History of Asia, including the emergence of Modern China and Japan.

HI 290 PROBLEMS IN NON-WESTERN HISTORY (3) These courses are designed to focus the attention of the student on a specific problem within the scope of historical study the fields of Africa, Asia, or Latin America. The problems will be of contemporary interest; and they will include intensive research, readings, class discussions, and the production of a scholarly paper. The field and problem(s) will be designated prior to the semester in which the course is offered. This course may be taken 3 times for credit.

HI 291 EXPANSION OF EUROPE AND IMPERIALISM (3) The period to be covered will be 1415 to the present. This will include the formation of both the "old" and "new" empires, as well as a study of the modern relations between ex-colony and "mother country." Topics to be covered will be the initial European exploration and colonization of Asia and Africa as well as the "new world." The conflict of European nations leading to the loss of most of the "old" empire by England, France, Spain, Portugal and Holland will be traced. The remainder of the course will be devoted to a study of the causes of the growth of the "new" empire under the general term imperialism.

HI 370 PROBLEMS IN AFRICAN HISTORY (3) Intensive guided research and presentations of written results in a scholarly manner on a major topic of historical interest in African studies. Topics such as nationalism, state formation and colonial institutions may be selected depending on research facilities and student interest. The major topic will be designated in advance of registration. The course may be taken three times for credit.

HI 373 MODERN LATIN AMERICA (3) An opportunity to study modern Latin America's struggle with elites, military and civilian juntas, regional pacts, and national security v. human rights since 1950. Lectures and directed readings will provide opportunities for in-depth special interest research and study.

HI 375 UNITED STATES — LATIN AMERICAN RELATIONS (3) The course probes the Latin American reponse to questions of U.S. interference and influence of various types, and it will also examine the snared goals of the two areas. Specific examples will be discussed, e.g., the Cuban Revolution, the Panama Canal Treaties, Multinational corporations, United States aid and development projects, and Latin American relations with the non-aligned world.

D. GENERAL

HI 385 PSYCHOHISTORY (3) To explore the possible relationships between psychoanalytical theory, biography, and historical movements. An examination and evaluation of some of the works on psychohistory and psychobiography will be included. Theoretical questions concerning the relationships between psychobiology, psychoanalytical theory, and biographical traits will be viewed.

HI 399 INDEPENDENT STUDY I, II, III (3)
Independent study consists of directed reading and research on an historical subject agreed upon by the student and instructor and approved by the Chair of the Department. Arrangements must be made with the instructor and Chair before registering for this course.

LIBERAL STUDIES PROGRAM

Director: John A. Loughney

B.A. DEGREE IN LIBERAL STUDIES

Some students are unable to satisfy their educational goals within the existing structure of academic majors at Westfield State College for several possible reasons:

a) Broad career or educational goals which can only be met by interdisciplinary study.
b) Strong academic interests that cut across departmental lines.
c) A major unavailable in the field of primary interest.

For these students, the flexibility of the Liberal Studies Major offers an opportunity to participate in designing an individual program of major studies which creatively integrates three areas of interest.

In the major, the three areas of concentration are chosen by the student with the approval of a Director. These areas are not to be chosen haphazardly, but should be interrelated when viewed in perspective with the student's educational goals. For example, a student interested in a career in television reporting might choose Communications-Journalism/Media Studies/Political Science; another with a passion for ancient Greek culture might combine Philosophy/History/Mathematics or Art; and the student interested in theatre production might elect Speech and Theatre/Business Administration/Music. The possibilities for goal-oriented integrated programs are numerous.

The courses within each area of concentration are chosen by the student with the approval of the Director, and should reflect a coherent, cohesive pattern. In addition, students are encouraged to choose electives in subject areas related to their areas of concentration.

Students are accepted into the Program only with the consent of the Director.

REQUIREMENTS

1. The College Core.
2. The Major, consisting of a primary area of concentration, 18 hours; a secondary area of concentration, 15 hours; and a third area of concentration, 12 hours, for a total of 45 hours.
3. Electives totaling 34-36 hours.

REGULATIONS

1. There are three (3) areas of concentration in the Liberal Studies Major, consisting of at least 18, 15 and 12 hours.
2. The areas of concentration may be selected from specific disciplines or from programs either free-standing or subsumed under a particular major which represent specific and distinct subject matters within a particular discipline.
3. Within each area of concentration, the selection of courses should not be random, but should reflect a coherent pattern designed by the student and approved by the Director.
4. Students are expected to choose areas of concentration which are intellectually complementary.
5. Areas of concentration are restricted to those compatible with a Bachelor of Arts degree, and must be approved by the Director.
6. Introductory level courses acceptable in the major itself are restricted to two courses.

WOMEN'S STUDIES MINOR

The Women's Studies Minor is an interdisciplinary program designed to provide students with the theoretical bases for understanding the role of women, both historically and currently, in shaping society's values, beliefs, laws, culture, arts, politics, and other institutions. It follows an integrative model which provides a coherent structure for using existing courses in the college curriculum.

Six courses constitute the minor: WS 101 Introduction to Women's Studies and WS 301 Seminar in Women's Studies (required of all minors), and *four* other courses from among electives such as CJ 312 Women and the Law, EN 226 Literature By and About Women, MU 104 Women's Role in Music: A History, PH 333 Seminar in Interdisciplinary Studies: "Women as Philosopers and Theorists," PL 323 Selected

Topics in Political Science: "Women and Politics," PY 356 Special Topics in Psychology: "Psychology of Women," and WS 202 Women in Modern Organizations. Other courses may be designated as Women's Studies electives when appropriate.

Students interested in the minor can obtain further information from and apply for admission to the Director of Liberal Studies. Advising is provided by faculty involved with the minor.

WS 101 **INTRODUCTION TO WOMEN'S STUDIES (3)** Introduces and develops the idea of Women's Studies as an approach to intellectual inquiry. Addresses a variety of Women's Studies issues in an interdisciplinary format, generally focusing on women's lives and experiences as illuminated by the social sciences and humanities.

WS 201 WOMEN IN MODERN ORGANIZATIONS (3) Uses an interdisciplinary approach to enhance the understanding of social, ethical, and occupational problems which women face in their work roles within modern organizations. Focuses on strategies for problem-solving within a social and ethical framework with the goal of professional achievement and personal satisfaction within the particular organization. *Prerequisites: WS 101 or equivalent.*

WS 301 SEMINAR IN WOMEN'S STUDIES (3) Designed to integrate conceptually and methodologically the major issues addressed by Women's Studies. Each student will complete and present a major research project which demonstrates an understanding of the interdisciplinary nature of women's issues. *Prerequisites: WS 101, advanced work in Women's Studies or consent of the instructor.*

THE MINOR IN LATIN AMERICAN STUDIES

Consisting of 18 credits, this minor is designed to incorporate perspectives from a wide range of disciplines such as literature, history, women's studies, anthropology and politics. Accordingly, students will take two courses from each of threee categories as follows: literature, language and the fine arts; history and philosophy; and the social sciences. The category in which LA 301, Seminar in Latin American Studies, is counted will depend on its topic in a given semester. Courses in addition to those given below may be added as appropriate when they are developed.

Mastery of the Spanish language should be an important goal for those intending to work or to pursue advanced study in an area related to Latin America. For the purpose of this minor students are required, prior to the beginning of the senior year, to attain intermediate-level competency in Spanish as judged by successful completion of the fourth semester of language study or equivalent experience.

List of Courses

Courses for the minor may be chosen from among the following:

HI 277 Latin American Nations, 1825 to the Present
HI 373 Modern Latin America
HI 375 United States-Latin American Relations
HI 399 Independent Studies
LS 200 Spanish Conversation
LS 206 Advanced Oral Spanish
LS 204 Spanish American Civilization
LS 307 Spanish American Literature I
LS 308 Spanish Amiercan Literature II
LS 309 Contemporary Latin American Literature
LS 200 Contemporary Latin American Literature in translation
MU 304 Afro-Caribbean Music
PH 300/333 Seminar in Philosophy: Latin American Thought (or Mexican Thought)
PL 328 Third World Politics
PL 330, 335 Special Topics: Latin American Governments
MS 316 Special Topics in Media Studies
LA 301 Seminar in Latin American Studies
(Special topics or independent studies may be offered when their content is appropriate and approved in a given semester).

LA 301 SEMINAR IN LATIN AMERICAN STUDIES: (3) Readings about and discussion of issues, figures, movements, or perspectives on Latin America, to accompany independent research by the student. Topics which integrate various forms of study about the Spanish, Portuguese, and French-speaking peoples of the hemisphere will be emphasized. *Prerequisites: introductory work in Latin American-related courses are equivalent.*

MASS COMMUNICATION

Chair, Edwin J. Abar, Jr.

Brooks Robards, Ralph R. Donald, John Paulmann, Joseph J. Tobia

Mass Communication examines forms of mass communication with emphasis on impact, regulation, socialization, criticism, and communication theory. The discipline also encompasses reserach in the areas of mass programming, public relations, advertising, production, and propaganda.

The major has been designed to provide students with a broad background in both media systems and marketing management. Thus, students are prepared for managerial positions not only in the expanding media industries, but also in less specialized industries where communications play an important role, either within the organization or in the marketing of products and services.

The department utilizes a full color television studio, a darkroom complex, production laboratories, portable color units, and Associated Press and Reuters News Service. The college also maintains a student-operated FM stereo radio station.

Media students have taken advantage of internships with newspapers and television and radio stations in Western Massachusetts, Boston, and Providence. Highly qualified students may spend a semester interning with foreign media organizations; the department currently has arrangements with the Bermuda Broadcasting Company and the Irish Television System.

REQUIREMENTS FOR MEDIA SYSTEMS AND MANAGEMENT MAJOR

The major is divided into three distinct but related areas with required introductory courses in each.

Area I — Media Systems (21 hours)

MS 101 — Introduction to Mass Communications — required
CS 101 — Computers in Society
MS 201 — Media in Education
MS 202 — Introduction to Photography
MS 301 — Television Production I
MS 302 — Seminar in Television Production
MS 304 — Mass Media in Society
MS 305 — Mass Media Internship
MS 306 — International Media Systems
MS 307 — Broadcast Law
MS 309 — Broadcast Media Analysis
MS 310 — Independent Study
MS 311 — Stereotyping in the Mass Media
MS 312 — Mass Media Criticism
MS 314 — Senior Thesis
MS 316 — Special Topics in Media Studies

Area II — Media Management (9 hours)

MG 101 — Introduction to Business and Management — required
MG 203 — Principles of Public Relations
MG 241 — Business Law
MG 251 — Management Information Systems
MG 301 — Labor Relations
MG 302 — Small Business Management
MG 303 — Office Management and Procedures
MG 325 — Business Strategy and Policy
MS 330 — Broadcast Operations

Area III — Media Marketing (9 hours)

MG 231 — Marketing Management I — required
PH 200 — Ethics in the Mass Media

FA 206 — Lettering and Layout
MS 303 — Propaganda, Persuasion, and the Mass Media
MG 307 — Market Research Techniques
MS 318 — Production of Instructional Media
FA 328 — Graphic Design I
MG 335 — Marketing Communications
FA 344 — Graphic Design II
MS 350 — Foundations of Media Research

MASS MEDIA MINORS

The Mass Media Minor — 18 hrs.
Required Course: MS 101 Introduction to Mass Communications
(Prerequisite for all Mass Media (MS) courses)
Electives: Five courses with Mass Media (MS) identification

The Media Systems and Management Minor — 18 hrs.
Required Courses: MS 101 Introduction to Mass Communications 3
MG 101 Introduction to Business and Management (Prerequisite for all Business Management courses)
or
MG 231 Marketing Management I 3
(Prerequisite for all Marketing courses)
Electives: Two courses with Media Studies (MS) identification
Two courses from Business Management offerings
or
Two courses from Marketing offerings

To Minor in either of the above two areas the student must notify the Mass Communication Department Chairman of his or her choice of minor.

The department has developed a new major program which is being reviewed by the Massachusetts Board of Regents of Higher Education as of the printing of this catalogue. Students should consult the department regarding the status of this new program.

COURSES

MS 101 INTRODUCTION TO MASS COMMUNICATIONS (3) A survey course in mass communications. Areas of discussion include basic media theory, history of the mass media, basic regulatory systems, and an introduction to the role of media in society.

MS 201 MEDIA IN EDUCATION (3) Designed to acquaint the student with the characteristics, applications and implications of mass media as an instructional tool. Major emphasis will be placed on the use of television, film, and still photography in an educational setting. Evaluation of software will also be covered.

MS 202 INTRODUCTION TO PHOTOGRAPHY (3) Examines various techniques and applications of photography. Areas of study include camera operation, film selection, lenses, filters, lighting, composition, portraits, black and white processing and printing, and manipulation of the image. The history of the medium and its communicative properties are also discussed.

MS 203 PRINCIPLES OF PUBLIC RELATIONS (3) Examines various principles and processes of public relations. Areas of discussion include organizational aspects, the public relations environment, fact finding, planning and programming, implementation, and evaluation. Particular attention will be given to audience targeting.

MS 204 WRITING OR MASS MEDIA (3) An examination of the manner in which messages are constructed for a vareity of mass communication formats and functions. Study will be conducted in areas such as print and broadcast journalism, advertising, organizational and political communication, as well as the visual dimensions of film and video. Students will be expected to develop both critical and practical skills in message design, visual, written, and oral communication. *Prerequisite: MS 101.*

MS 301 TELEVISION PRODUCTION I (3) Topics include lighting, camera operation, directing, switching, audio control, and general operation and set up of a mini-studio. Each student will be required to write and direct a ten minute color video tape production. All talent and production crews will be selected from class members. The class is limited to 12 students. *Prerequisite: permission of instructor.*

MS 302 SEMINAR IN TELEVISION PRODUCTION (3) Designed to give the student an opportunity to conduct in-depth study into particular areas of television production. Students may choose to research a facet of television production or may select one of many genres used by the medium. Students will be required to prepare a formal paper and a 30-60 minute television production for discussion by the seminar. Participation in the productions of the College and assignments as a local broadcast station are requirements of the course (subject to arrangement with the station). *Prerequisite: Television Production I and permission of instructor.*

MS 303 PROPAGANDA, PERSUASION, AND THE MASS MEDIA (3) Activity involves students in monitoring, selecting and examining advertisements, speeches, editorials, jingles, etc., for the purpose of analyzing and identifying the many techniques and types of propaganda in the media. Details the "Five Pearls of Persuasion" common to media marketing, uses historical models and current case studies on media impact, develops basic analytic skills for testing credibility of media messages.

MS 304 MASS MEDIA IN SOCIETY (3) Examines various aspects of mass media in society. Content includes the development and nature of mass communications theory through the study of communication models, international systems, advertising, regulation, delivery systems, and impact. A resaerch paper is required. *Prerequisite: Intro to Mass Comm. or permission of instructor.*

MS 305 MASS MEDIA INTERNSHIP (3-15) Students, through prior arrangement, will intern at various local, regional, or national media outlets.

MS 306 INTERNATIONAL MEDIA SYSTEMS (3) The course will examine various international media systems. Specific countries included are France, West Germany, Belgium, Holland, and Great Britain. Areas of discussion will include financing, control, and corporate structure. This course may be elected in field study form. *Prerequisite: Intro to Mass Comm. or equivalent.*

MS 307 BROADCAST LAW (3) Examines the decisions of the Federal Communications Commission, the Federal Trade Commission, and the Supreme Court that deal directly with mass media. Case studies of specific decisions will be examined as well as the role of the government broadcasting. *Prerequisite: Intro to Mass Comm. or equivalent.*

MS 309 BROADCAST MEDIA ANALYSIS (3) Areas of discussion include effective utilization of the immediacy of radio and television, use of audio and video-tape for on-the-spot coverage, the relationship of word and picture, visual and aural redundancy, adapting other media such as newspapers and wire services to the electronic media, and the role of camera work in generating effective news delivery. *Prerequisite: Intro to Mass Comm. or equivalent.*

MS 310 INDEPENDENT STUDY (3-6) Independent study of topics in media studies under careful faculty supervision. *Prerequisite: permission of instructor and Department Chair.*

MS 311 STEREOTYPING IN THE MASS MEDIA (3) Examines how various minority groups are portrayed in the media. It includes an examination of the relevant research in media stereotyping and an analysis of the roles of the industry, the government and public in formulating prevalent stereotypes used in the media. *Prerequisite: Intro to Mass Comm. or equivalent.*

MS 312 MASS MEDIA CRITICISM (3) Examines criticism of the Mass Media. The focus of the course will be on such broadcast media as radio and television, the various critical approaches which have been used and the relevance of those approaches today. Students will explore such issues as the early emphasis on appreciation and conventional program reviewing, more recent attempts to use statistical procedures in program analysis, and the collective nature of the media. *Prerequisite: Introduction to Mass Communications.*

MS 314 SENIOR THESIS (3) Course offers the student an opportunity to conduct specialized research in media studies. Evaluation of the work will be conducted by the entire department. An oral defense of the project is required as well as public dissemination of the final written report. *Prerequisite: Foundations of Media Research, senior status, and permission of the department.*

MS 316 SPECIAL TOPICS IN MEDIA STUDIES (3) Examines selected media issues, perspectives, or themes chosen for their timely interest. *Prerequisite: Introduction to Mass Communications.*

MS 318 PRODUCTION OF INSTRUCTIONAL MEDIA (3) Designed to give the student a background of information in the production of posters, charts, graphs, exhibits, models, devices, photographs (sets), transparencies, tape recordings, and the fundamentals of motion picture production. Limited to 16 students.

MS 320 FOUNDATIONS OF MEDIA RESEARCH (3) An examination of the field of broadcast operations. Areas of discussion include staffing, electronic newsgathering assignments, remote broadcasting, programming, Federal Communications Commission forms and regulations, and various responsibilitiesof broadcast management. *Prerequisite: MS 101 or MG 101 or equivalent.*

MS 330 BROADCAST OPERATIONS (3) An examination of the various methodologies of media research. Topics will include analysis of various rating systems, statisitcs, audience survey methods, content analysis, uses and gratification, and evaluation of current media research. *Prerequisite: MS 101 and junior/senior status.*

MS 333 TELEVISION PRODUCTION WORKSHOP (3)

MS 340 ORGANIZATIONAL COMMUNICATIONS (3) Concentrates on the process of creating and exchanging messages within a network of relationships in an organization; examines the organization's in-house and public relations as they influence adaptation to the dynamic environment. Include case studies and current news media reports of communications problems and remedies as applications of communications theory. An organizational audit may be conducted. *Prerequisite: MS 101, MS 203, and MS 303 or permission of instructor.*

MS 345 TV AND FILM PRODUCTION ANALYSIS (3) An examination of television and film productions in terms of their managerial, financial, organizational and logistical requirements. Students will analyze and develop cost effective models for use in TV and film production management. *Prerequisite: MS 301 or instructor approval.*

MS 350 FILM AS MASS COMMUNICATION (3) Examines film from a mass communication perspective. Particular emphasis will be placed on the cultural role of film, including economic factors as well as sociological, psychological, political and critical dimensions. An analysis of the impact of technology on the industry will also be conducted. *Prerequisite: MS 101.*

MATHEMATICS

Chair, Catherine Lilly

Maureen Bardwell, Clarence Bennett, Ronald R. Edwards, Dianne Haber, Warren H. Hill, Norman Hosay, Alphonse Jackowski, Andrew Kim, Robert McGuigan, Peter Rosnick

Mathematics is a subject with a history which stretches for thousands of years. It has been a major cultural force in Western civilization, serving as the foundation for scientific reasoning and forming the core of the major theories of physical science, as well as determining the direction and content of much philosophic thought. It has supplied substance to economic and political theories, has fashioned major painting, musical, architectural, and literary styles, has fathered our logic, and has furnished some of the best answers we have to fundamental questions about the nature of man and his universe.

Since Mathematics can be studied both as a pure discipline and as an applied discipline, the Department of Mathematics offers a major in mathematics, providing a foundation of pure and applied mathematics (suitable, among other things, for the preparation of high school teachers of mathematics). In addition, we provide courses which satisfy the college Common Core.

Seventy percent of the faculty in this department hold terminal degrees in their field.

Students who major in Mathematics may wish to consider careers in actuarial science, secondary education, or further graduate work in mathematics. The study of mathematical sciences also provides a strong foundation for further professional education in a variety of areas.

Also, our Actuarial Preparatory Program recommends a sequence of courses in mathematics, economics, and business administration which are designed to prepare students for successful completion of the first three actuarial examinations.

REQUIREMENTS FOR MATHEMATICS MAJORS

Requirements

Calculus I, II, III, and IV Linear Algebra Modern Abstract Algebra I and II Modern Geometry I	24 credits

Electives

Group 1 (Choose two) Differential Equations Introductory Analysis Complex Analysis Introduction to Numerical Methods	6 credits
Group 2 (choose one) Linear Algebra Modern Geometry II Theory of Numbers Introduction Topology	3 credits
Group 3 (Choose one) Probability Theory Operations Research and Modeling Any computer science elective	3 credits
Total	36 credits

COURSES — MATHEMATICS

MA 103 COLLEGE ALGEBRA (3) First of a two course sequence designed to prepare students for Calculus. Topics include the real number system; inequalities and absolute values: introduction to functions; exponents; linear, polynomial and rational expressions; introduction to graphing: exponential and logarithmic functions. *Prerequisite: one year high school algebra.*

MA 104 PRECALCULUS (3) Topics covered include an in-depth discussion of functions; graphing; exponential and logarithmic functions; trigonometric functions; and analytic geometry and conic sections. *Prerequisites: two years high school mathematics or MA 103.*

MA 105 CALCULUS I (3) A standard first semester course in the calculus. Topics include functions and limits, the derivative, continuity of functions, differentiation of functions, related rates, differentials and approximations, maxima and minima with applications, the mean value theorem, antiderivatives, the definite integral, and the fundamental theorem of calculus. *Prerequisites: high school algebra, geometry, and trigonometry, or MA 104.*

MA 106 CALCULUS II (3) A continuation of Calculus I. Topics include evaluation of definite integrals, area, volume, arc length, applications of definite integrals, transcendental functions, techniques of integration, indeterminate forms, improper integrals, Taylor approximations, and an introduction to numerical methods. *Prerequisite: MA 105 or equivalent.*

MA 108 ELEMENTARY STATISTICS (3) Intended to provide knowledge and computational skill in statistical procedures necessary to apply research techniques to problems in education, psychology, business and social sciences. The topics include nature of elementary statistics, nature of probability, sampling and sampling distributions, problems of estimations, tests of hypotheses, regression and correlation. Elective for non-mathematics majors. *Prerequisite: two years high school algebra or MA 103.*

MA 109 FINITE MATHEMATICS (3) Compound statements, sets, samples spaces, probability theory, vectors and matrices, Stochastic processes, Bemoulli trials, Markov chains, applications, introduction to graph theory. *Prerequisite: two years high school algebra or MA 103.*

MA 110 MATHEMATICAL EXPLORATIONS (3) An exploration of topics from elementary theoretical mathematics, including some of, but not limited to, the following topics: sets, logic, number systems, geometry, elementary number theory, and counting. Designed to give the liberal arts major an appreciation of mathematical reasoning and content. MA 110 and 111 may be taken in any order. *Prerequisite: two years high school algebra or MA 103.*

MA 111 MATHEMATICAL APPLICATIONS (3) A selection of topics from applied mathematics, including some of, but not limited to, the following topics: probability, statistics, solutions of linear equations and systems of linear equations, linear programming, computer programming, and consumer mathematics. Designed to give the liberal arts major an appreciation of the way in which mathematics can be applied in the real world. MA 110 and 111 may be taken in any order. *Prerequisite: two years high school algebra or MA 103.*

MA 113-114 MATHEMATICS FOR SCIENCE I and II (6) A two semester course designed specifically for students majoring in Biology and General Science. Emphasis is placed on the application of mathematics to the sciences with measuring, displaying and analyzing data. Lecture topics include measurement, computing techniques and devices, relations and functions, techniques of graphing and curve fitting. The second semester material involves the basic concepts of calculus and their applications to the scientific problems. Lecture topics include limits, differentation, integration, applications of the definite integral, techniques of integration and elementary differential equations. *Prerequisite: two years high school algebra or MA 103.*

MA 115 MATHEMATICS FOR BUSINESS AND SOCIAL SCIENCES (3) A study of selected topics with particular emphasis on applications in business and social sciences. Topics include sets, probability, solution of equations, systems of linear equations, introduction to linear programming and, as time permits, an introduction to calculus. *Prerequisite: two years high school algebra or MA 103.*

MA 116 INTRODUCTION TO MATHEMATICAL SYSTEMS (3) Intended as a first course for students planning to major in mathematics. Emphasis in the course is on the structure of mathematical systems and methods of proof. Topics to be considered: logic and the nature of proof, sets, number systems, relations and functions, mathematical systems including groups and fields. *Prerequisite: high school math through trigonometry.*

MA 118 LINEAR ALGEBRA (3) Study of fundamental concepts of linear algebra over the field of real numbers. Topics include solution of simultaneous linear equations, vector spaces, linear independence and dependence, basis, subspaces, linear transformations and matrices and their properties. *Prerequisite: MA 104 or equivalent.*

MA 131-132 MATHEMATICS FOR TEACHER PREPARATION I & II (6) A two semester course in the fundamental concepts of mathematics designed to serve a two-fold purpose: 1) to provide the prospective teacher with the mathematical background necessary to teach the modern elementary and junior high school curricula, and 2) to provide students with a meaningful terminal course wherein structure and unifying concepts are emphasized. Topics will include sets, methods of proof and disproof, number systems, geometry, mensuration, and relations and functions. *Prerequisite: two years high school algebra or MA 103.*

MA 201 CALCULUS III (3) A continuation of Calculus II. Topics include infinite series, conic sections, polar coordinates, parametric equations, Cartesian coordinates in R^3, Vectors in R^2 and R^3, curvature, acceleration, vector valued functions and curvilinear motion, and surfaces in R^3. *Prerequisite: MA 106.*

MA 202 CALCULUS IV (3) A continuation of Calculus III. Topics include cylindrical and spherical coordinates, functions of two or more variables, partial differentiation, directional derivatives and gradients, Lagrange multipliers, iterated integrals, double and triple integrals with applications, vector fields, line integrals and independence of path, Green's Theorem, divergence, Stokes Theorem, and if time permits, an introduction to differential equations. *Prerequisite: MA 201.*

MA 203 MATHEMATICS IN THE ELEMENTARY SCHOOL (3) Designed to reinforce the mathematical background and to enhance the effectiveness of the prospective elementary teacher. An integral part of the course is an investigation of the content, procedures, and materials of modern curricula for the elementary school.

MA 220 DISCRETE STRUCTURES (3) An introduction to discrete mathematical structures for Computer Science: discrete algebraic structures, algorithms and applications to structural programming and the analysis of algorithms; graphs, digraphs and applications to electrical and scheduling network; lattices, Boolean algebra and applications to switching theory. *Prerequisite: CS 121 and MA 118.*

MA 237 MATHEMATICS TUTOR TRAINING SEMINAR (1) A training seminar for upperclass students involved with the Mathematics Peer Tutoring Program to meet the following three objectives: 1) presenting mathematics with understanding and flexibility; 2) recognizing, diagnosing, and remediating common math misconceptions, 3) becoming more sensitive to some of the affective issues arising both in tutoring relationships and for students struggling with mathematics. Prerequisite: MA 106, permission of instructor, and concurrent participation in the mathematics tutoring program. May be elected only once for credit.

MA 301 MODERN ABSTRACT ALGEBRA I (3) A study of groups, rings, integral domains and fields, with special emphasis on the real and complex fields. Required of all mathematics majors. *Prerequisite: MA 118.*

MA 302 MODERN ABSTRACT ALGEBRA II (3) Polynomial rings, vector spaces, linear transformations, elementary theory of matrices and determinants. Required of all mathematics majors. *Prerequisite: MA 301.*

MA 304 DIFFERENTIAL EQUATIONS (3) Geometric and physical meaning of differential equations. Theory and solution of first, second and higher order linear and non-linear differential equations. Initial and boundary value problems. Finite difference equations. *Prerequisite: MA 201 and MA 118.*

MA 305 PROBABILITY THEORY (3) Covers mathematical probability theory including: review of set theory, principles of counting, sample spaces and probability functions, random variables, joint probability functions, discrete distributions and continuous distributions. *Prerequisite: MA 201.*

MA 306 MODERN GEOMETRY I (3) An integrated course consisting of intuitive, synthetic, and analytic approaches to Euclidean and other geometries. Topics will include axiomation foundations, finite geometries, non-Euclidean geometries, and synthetic projective geometry. *Prerequisite: MA 118.*

MA 307 MODERN GEOMETRY II (3) Geometric and algebraic invariants, groups of transformations, topological, projective, affine and Euclidean transformations. *Prerequisite: MA 306.*

MA 308 INTRODUCTORY ANALYSIS (3) Topology of real numbers, Cauchy sequences, metric completeness, continuity, compactness, connectedness. Sequence and series and uniform convergence of infinite series. Derivatives and define integrals. *Prerequisite: MA 201.*

MA 309 INTRODUCTORY TOPOLOGY (3) A simple, thorough survey of the elementary topics of point-set topology of the real line and plane topological spaces; metric spaces; mappings; connectedness; compactness. *Prerequisite: MA 302.*

MA 311 THEORY OF NUMBERS (3) Properties of integers including congruences, primes and factorization, continued fractions, quadratic residues, linear diophantine equations and number theoretic functions. *Prerequisite: MA 106 or MA 118.*

MA 312 HISTORY OF MATHEMATICS (3) A survey of the development of some of the major factors in modern mathematics, from antiquity to the present. *Prerequisites: MA 301 and 302.*

MA 323 COMPLEX ANALYSIS (3) Algebra of complex numbers, analytic functions, Cauchy Riemann conditions, conformal mapping, line integrals, Cauchy integral formula, residue integration, Taylor and Laurent series. *Prerequisite: MA 202.*

MA 333 APPLIED STATISTICS AND EXPERIMENTAL DESIGN (3) A study of the application of computer programming to statistical procedures employed in empirical research and the interpretation of numerical results. Topics in statistics include: introduction to descriptive and inferrential statistics, hypothesis testing, parametric and non-parametric tests (correlation, regression, the t-test, analysis of variance, and factor analysis). The underlying assumptions of several experimental designs will also be examined. *Prerequisite: MA 108 or equivalent, and knowledge of at least one scientific programming language.*

MA 334 OPERATIONS RESEARCH AND MODELING (3) A study of mathematical modeling and of the models of interest in operations research, which may include distribution problems, linear programming, the simplex method and applications. CPM, network problems, non-linear programming problems, Markov chains, queuing models, and simulation. *Prerequisite: MA 118, MA 108, and knowledge of at least one programming language.*

MA 335 INTRODUCTION TO NUMERICAL METHODS (3) Intended for majors in mathematics or computer science. Uses the FORTRAN language for numerical computation but no previous knowledge of FORTRAN is assumed. Standard algorithms of numerical analysis will be chosen from: systems of linear equations, differential equations, integration, interpolation, non-linear equations. *Prerequisites: MA 118, 201 and knowledge of at least one programming language.*

MA 337 FOUNDATIONS OF SECONDARY SCHOOL MATHEMATICS (3) Designed to build upon student's mathematics background, relating students' mathematical knowledge to understanding and teaching the middle or secondary school mathematics curriculum. Topics to be considered are: geometry, algebra, basic skills, number theory, probability and statistics and the use of calculators and computers in the classroom.

MA 338 STATISTICAL THEORY (3) A systematic treatment of theoretical mathematical statistics assuming preparation in post-calculus probability theory. Topics covered include estimation, hypothesis testing, linear models, non-parametric methods. *Prerequisite: MA 305.*

MA 399 INDEPENDENT STUDY (1-6) Independent study of topics in mathematics under careful faculty supervision. Intended for capable students to broaden their mathematics program or to gain depth in a particular area of interest. *Prerequisite: permission of instructor and Department Chair is required.*

MUSIC

Chair, Theodore C. Davidovich

Donald J. Bastarache, Floyd W. Corson, Peter J. Demos, Catherine A. Dower, Arthur Jannery, Daniel Koury, Lloyd K. Manzer.

The Music Department, in alliance with a liberal arts base, provides the highest standard of practical and theoretical training toward the development of potential in the individual student. The department places the student at the center of its focus. Professional training in musicianship, performance, pedagogy, and literature furnishes an environment in which the abilities of the student can be fully developed. After completing music studies at Westfield State College, the student is well equipped to make choices regarding further professional goals and objectives.

Areas of concentration are provided in Performance, Theory and Composition, Music History, Music Education, Jazz Studies, Musical Theatre, and Music Merchandising, and Business Management. The successful completion of the Concentration in Music Education leads toward Certification by the State Board of Education.

Any qualified student may participate in the department's Performance Ensembles. Numerous concerts, recitals, and other productions are presented to the entire community each semester.

The Music Department's facilities consist of an electronic piano laboratory, individual practice rooms (equipped with pianos), a music listening room, a recital room, and practice sound modules. Additionally, there is a growing collection of recordings and cassettes available to students. An impressive collection of texts on music and an expanding collection of music scores are housed in the College Library.

Graduates majoring in music have found careers in music direction for churches, in music education, recording engineering, and music retailing, as well as in careers outside of the field of Music.

REQUIREMENTS FOR MUSIC MAJORS

MUSIC MAJOR CORE

MUSIC THEORY I	3
MUSIC THEORY II	3
BASIC MUSICIANSHIP I and II	(1-1) 2
MUSIC HISTORY I and II	6
MUSIC INSTRUMENT/VOICE (Levels 1-7)	14
PIANO PROFICIENCY	0-3
ENSEMBLE	6
RECITAL CLASS	1
Total Credits	35

All Music Majors must participate in a musical organization each semester. Details available from Department.

AREAS OF CONCENTRATION

Concentration in Music Education

The student will select the appropriate group of listed courses for the certification sought: Teacher of Music: Elementary (K-9), or Teacher of Music: Secondary (5-12).

Music

Music Theory III	3
Form and Analysis	3
Voice Class	1
Total Credits	7

Music Education Core

Introduction to Music Education	1
Classroom Music in the Public School	2
Music Supervision and Curriculum	3
Choral or Instrumental Conducting	3
Education of the Exceptional Child	3
Total Credits	12

Teacher of Music: Elementary

Child Psychology	3
Elementary Music Methods	3
Instrument Classes (Under Advisement)	0-3
Practicum: Elementary	12
Practicum: Seminar in Music Education	3
Total Credits	21-24

Teacher of Music: Secondary

Adolescent Psychology	3
Instrumental Music in the Public School or Vocal Music in the Secondary School	2
Instrumental Classes (Instrumental Emphasis (6)) (Vocal Emphasis (3))	3-6
Practicum: Secondary	12
Practicum: Seminar in Music Education	3
Total Credits	23-26

Concentration in Performance

Major Instrument or Voice	10
Music History I or II	3
Music History Elective	3
Music Theory III	3
Music Theory or Composition Elective	3
Basic Musicianship III	2
Choral or Instrumental Conducting	3
Form and Analysis	3
Senior Recital	0
Total (Music)	30

Students will Audition for admission into this Concentration; pass a Qualifying Examination before entering the fifth level of Applied Studies; and present a Satisfactory Junior Performance.

Concentration in Music History

Music in the Middle Ages and Renaissance	3
Music in the Baroque Period	3
Music in the Classical and Romantic Periods	3
Music in the Twentieth Century	3
Music Theory III	3
Form and Analysis	3
Instrumental or Choral Conducting	3
Total (Music)	21

Concentration in Theory and Composition

Music Theory III	3
Orchestration	3
Form and Analysis	3
Counterpoint	3
Composition I, II, and III	6
Instrumental Classes (from two of the following: (Strings, Woodwinds, Brass, and Percussion)	2
Choral or Instrumental Conducting	3
Advanced Music Theory	3
Advanced Composition II and III	4
Music History Elective	3
Total (Music)	33

The last three listed courses in the Concentration in Theory and Composition are not required of those students who have a double concentration in music.

For the student in the Theory and Composition Concentration, the fourteen hours required in the Music Major Core in MAJOR INSTRUMENT OR VOICE, will be distributed as follows: MAJOR INSTRUMENT or VOICE (8) MINOR INSTRUMENT/PIANO (4), and ADVANCED COMPOSITION I (2).

Concentration in Musical Theatre

Voice Class	1
Choral or Instrumental Conducting	3
Musical Theatre Practicum (1-1-1-1)	4
Music History I or II	3
Total (Music)	11

Acting I and II	6
Theatre Workshop (6), or Vocal Techniques (3) and Theatre Arts (3)	6
Ballet I and II	2
Dance: Folk, Modern, Tap, or Jazz	2
Total (Theatre and Dance)	16

AND CONCENTRATION IN:

Instrumental Jazz Studies — or —

Jazz/Rock History	3
Jazz Theory and Analysis	3
Jazz Improvisation I	2
Contemporary Harmonic Techniques	3
Stage Band Arranging I	3
Stage Band Arranging II	3
Jazz Ensemble	2
Jazz Keyboard Harmony I, II, III	3
Jazz Improvisation II	2
Jazz Instrument	2
Total Credits	26

Music Merchandising and Business Management

Music Theory or Contemporary Harmonic Techniques	3
Jazz Theory and Analysis	3
Music History I or II	
Instrumental Classes	
From: Vl., Tpt., Cl., Pc., Guitar (4)	
From: Ob., Fl., Sax., Hn., Trb. (3)	7
Instrumental or Choral Conducting	3
Total (Music)	19

Music Major — No Specific Concentration

Music Theory and Music History Electives	9
Ensembles	2

Vocal Jazz Studies

Jazz/Rock History	3
Jazz Theory and Analysis	3
Jazz Improvisation I	2
Contemporary Harmonic Techniques	3
Vocal Jazz Techniques	3
Vocal Jazz Arranging	3
Jazz Keyboard Harmony I, II, III	(1-1-1) 3
Vocal Jazz Ensemble	2
Jazz Voice	2
Total Credits	24

Introduction to Business Management	3
Marketing Management	3
Accounting I	3
Small Business Management	3
Total (Business)	12

Music Minor

Music Theory I and II	6
Major Instrument of Voice	6
Instrumental or Choral Conducting	3
Music History I or II	3
Total (Music)	18

COURSES

THEORY AND COMPOSITION

MU 110 BASIC MUSIC THEORY (3) (non majors) The study of notation, scale construction, intervals, chords, rhythm, and elements of form and counterpoint.

MU 111 BASIC MUSIC THEORY (Majors and Minors) (3) The study of notation, scale, interval and chord construction, rhythm, and elements of melody, form and counterpoint.

MU 112 MUSIC THEORY I (3) A continuation of Basic Music Theory (MU 111) with study of Inversions, Nonharmonic Tones, Harmonic Rhythm, Modulations, Dominant Seventh Chords, the Principles of Secondary Dominants, and simple descriptive analysis. Continued exploration of melodic structure, and musical texture.

MU 113 BASIC MUSICIANSHIP I (1) Elementary solfége, rhythm exercises, musical dictation, and musical terms in Italian and German.

MU 114 BASIC MUSICIANSHIP II (91) Intermediate solfège, rhythm exercises, musical dictation, and musical terms in the French language. *Prerequisite: MU 113.*

MU 211 MUSIC THEORY II (3) Emphasis is upon the study of extended chords, sequence, and chromatic harmonies. Continued development of analytical techniques. *Prerequisite: MU 112.*

MU 212 MUSIC THEORY III (3) Emphasis is upon late Romantic and Twentieth-Century Harmonic Techniques. Also, an introduction to the experimental techniques of Contemporary Music, and continued concern for the development of analytical techniques. *Prerequisite: MU 211.*

MU 213 BASIC MUSICIANSHIP III (2) Advanced solfgège, rhythm exercises. Interpretation of scores through formal analysis. *Prerequisite: MU 114.*

MU 214 COMPOSITION I (2) An introduction to basic compositional techniques in music. Creative work in smaller forms. *Prerequisite: MU 112.*

MU 215 COMPOSITION II (2) Emphasis is upon varied instrumental and vocal media. Includes an introduction to Twentieth-Century Compositional Techniques. *Prerequisites: MU 211 and MU 214.*

MU 216 COMPOSITION III (2) Emphasis is upon individual projects. Performance of original works will be encouraged. *Prerequisites: MU 212, MU 210, and MU 214.*

MU 217 ORCHESTRATION (3) A study of the technical aspects of each instrument to include ranges, and transposition. Score analysis and arranging for various combinations of instruments. *Prerequisites: MU 112, and Instrument Classes.*

MU 310 COUNTERPOINT (3) A review of species counterpoint will lead to a study of tonal counterpoint in the style of the 18th Century. Analysis of representative works will complement the written work in from two to four voices, culminating in efforts in such forms and techniques as the invention, canon, invertible counterpoint, and fugue. *Prerequisite: MU 112.*

MU 311 ADVANCED MUSIC THEORY (3) Continuation of Music Theory III with special focus upon the works of contemporary theorists, and the application of their concepts and principles to music of all periods and styles. May be repeated for credit. *Prerequisites: MU 212 and MU 312.*

MU 312 FORM AND ANALYSIS (3) An introduction to the analysis of musical forms. Works analyzed: 17th century to late 19th century compositions. *Prerequisite: MU 212.*

MU 314 ADVANCED COMPOSITION I (2) Continuation of Composition III. Performances of original works will be required. *Prerequisite: MU 312.*

MU 315 ADVANCED COMPOSITION II (2) Continued study in Music Composition, with emphasis upon *extended* works for larger ensembles. *Prerequisite: MU 314.*

MU 316 ADVANCED COMPOSITION III (2) The final semester in Composition. Concern for the presentation of a public recital and/or the development of a portfolio of compositions. *Prerequisite: MU 315.*

MU 317 CHORAL ARRANGING (3) The development of arranging techniques for the choral ensemble. Attention is devoted to harmonic arranging for both accompanied and unaccompanied female, male, and mixed ensembles. Attention to contrapuntal aspects of the choral arranging process. *Prerequisites: MU 212 and MU 310.*

MU 399 INDEPENDENT STUDY (Theory and Composition) (3-6)

MUSIC HISTORY, LITERATURE, AND APPRECIATION

MU 101 MUSIC APPRECIATION (3) The study of masterpieces of music from each era, from the Middle Ages through contemporary times. Emphasis is on directed listening and music is analyzed with reference to style characteristics.

MU 101 MUSIC APPRECIATION (Music majors) (3) The study of music of each era, from the Middle Ages through contemporary times. Music is analyzed through directed listening, through the use of musical scores, and with reference to style characteristics.

MU 102 MUSIC IN AMERICA (3) A survey of music in America from the landing of Columbus through the Twentieth Century.

MU 104 WORLD MUSIC (3) A survey of World Music literature including the music of non-Western cultures — China, India, and the Near East; the tribal music of Africa and its influence on the music of South America and the Caribbean area; the lesser known music of the Western world including Iceland, Ireland, and the Indians of America. Designed for Honors students of the college. *Prerequisite: MU 101 or permission of instructor.*

MU 106 WOMEN'S ROLE IN MUSIC: A HISTORY (3) The course will trace woman's involvement in the field of music from the first publication by a woman (1557) to the music of the twentieth century. It will include a study of women composers, women performers, musicologists, educators and textbook writers, and women as patrons of the arts.

MU 160 HISTORY OF JAZZ (3) The study of jazz music from the early 1900's to the present. Emphasis on styles and trends of major jazz performers and ensembles within each period.

MU 200 MUSIC HISTORY I (3) A chronological study of the history of musical styles showing the development of musical forms from the Middle Ages through the Baroque Era.

MU 201 MUSIC HISTORY II (3) A contiuation of Music History I. The study of musical forms as developed from the Classical Era through the Twentieth Century.

MU 300 MUSIC IN THE MIDDLE AGES AND RENAISSANCE (3) A chronological study of forms and styles of Western Music from Antiquity through the Sixteenth Century. *Prerequisite: MU 200 or permission of the Instructor.*

MU 301 MUSIC IN THE BAROQUE ERA (3) The history of music from 1600 to 1750 with emphasis on the musical styles of Monteverdi, Bach, and Handel. *Prerequisite: MU 200 or permission of the Instructor.*

MU 302 MUSIC IN THE CLASSIC AND ROMANTIC ERAS (3) A study of the forms and styles of music from 1740 to 1900. *Prerequisite: Music History I and II or permission of the Instructor.*

MU 303 MUSIC IN THE TWENTIETH CENTURY (3) A study of changing styles of music from he late German Romanticists through the experimental music of contemporary times. *Prerequisites: MU 200 and 201 or permission of the Instructor.*

MU 304 AFRO-CARIBBEAN MUSIC (3) Music of Puerto Rico and the Caribbean Islands. A study of the influences of Spanish, African and Indian music on the music of Puerto Rico, and its influence on the music of America. Course is especially designed for the classroom teacher. *Prerequisite: MU 101.*

MU 399 INDEPENDENT STUDY (Music History) (3-6)

MUSIC EDUCATION

MU 120 INTRODUCTION TO MUSIC EDUCATION (1) An introductory experience in music education for prospective music teachers. The course consists of lectures, group discussions,and field experiences. Observations and interactions with students and music educators in public schools. Recommended for Spring Semester of the Freshman Year.

MU 220 MUSIC IN THE ELEMENTARY SCHOOL (3) A course designed for the non music major. Introduces the materials and techniques with which the elementary education major may guide young children in musical experiences. Emphasis is on the development of musical knowledge and teaching skills.

MU 221 INSTRUMENTAL MUSIC IN THE PUBLIC SCHOOLS (2) The study of a comprehensive instrumental program at the elementary and secondary school levels. Attention is given to recruitment procedures, establishing instrumental classes, selection of instructional materials and literature, organizing and developing large and small ensembles and evaluative techniques. Field experience in public schools will be required. *Prerequisites: MU 120, and a minimum of four semester hours in Instrument Classes.*

MU 320 CLASSROOM MUSIC IN THE PUBLIC SCHOOLS (2) A lecture/laboratory experience designed to develop a program of required and elective music classes at the junior-senior high school levels. Attention to the planning, organization and implementation of classes in general music, music theory, music listening and the related arts. Assignments at area public schools are required. *Prerequisites: MU 120, 101, 200 or 201, and 211. Also, Piano Proficiency, and PY 301, or PY 302.*

MU 321 VOCAL MUSIC IN THE SECONDARY SCHOOLS (2) A study of vocal music activities in the public schools, from the middle-school level through the senior high school. The course/field experience prepares students to organize and develop a choral program, analyze and evaluate choral literature, and prepare for rehearsals and performances. *Prerequisites: MU 120, 156, 274 Major Instrument V/Voice and Piano Proficiency.*

MU 322 ELEMENTARY MUSIC METHODS (3) A survey of music literature, materials and current teaching techniques appropriate for the elementary school *vocal music* program. Consideration is given to identifying goals and developing sequential musical experiences. Assignments in area public/private schools will be required throughout the semester. *Prerequisites: PY 301, MU 156, Piano Proficiency, and MU 120.*

MU 323 MUSIC SUPERVISION AND CURRICULUM (3) The principles underlying a *comprehensive education program* from kindergarten through the senior high school. This course deals with staffing, curriculum development, evaluation, scheduling, finance and public relations. *Prerequisites: MU 322, 321, and 320.*

MU 324 PRACTICUM: MUSIC, ELEMENTARY (12) A variety of teaching experiences in a public school at the elementary school level under the supervision of a cooperating practitioner and a college professor. A full semester will be devoted to the practicum, and more than one half of the assignment must be at the elementary level in order to qualify for elementary certification. Conferences are scheduled regularly as part of the growth and evaluation process. *Corequisite: MU 326. Prerequisites: Completion of all required music education courses for Elementary Certification.*

MU 325 PRACTICUM: MUSIC, SECONDARY (12) A variety of teaching experiences in a public school at the secondary level under the supervision of a cooperating practitioner and college supervisor. The student will devote a full semester to the practicum. More than one half of the assignment must be at the secondary level in order to qualify for secondary certification. Conferences wizh cooperating practitioner and college supervisor are scheduled regularly as part of the growth and evaluation process. *Corequisite: MU 326. Prerequisites: Completion of all Music Education Courses required for Secondary Certification.*

MU 326 PRACTICUM: SEMINAR IN MUSIC EDUCATION (3) Formal meetings of students concurrently engaged in Practicum: Music, Elementary or Secondary. Lectures and group discussions will center on the assessment of student teacher needs, methodologies, and the development and articulation of a personal philosophy of music education. *Prerequisites: Completion of all Music Education courses required for Elementary, or Secondary Certification.*

MU 399 INDEPENDENT STUDY (Music Education) (3-6).

CONDUCTING

MU 330 CHORAL CONDUCTING (3) The development of conducting techniques in *relation* to rhythmic/melodic exercises. Basic techniques of choral conducting, voice production, choral literature and performance practices. *Prerequisites: MU 201 and 211.*

MU 331 INSTRUMENTAL CONDUCTING (3) Conducting and score reading of standard orchestral repertoire. Attention is given to the broader aspects of style, interpretation, terminology, transposition and the detailed aspects of baton technique. *Prerequisites: MU 201, 211, and Instrument Classes.*

MU 399 INDEPENDENT STUDY (Conducting) (3-6).

PERFORMING ENSEMBLES

MU 140 CHORALE (1) Membership by audition. Mixed voices emphasizing the A Cappella Tradition — the Chorale also performs with orchestra. Extensive performance schedule on and off campus. Literature spans all periods of music history. The Chorale tours every spring. May be repeated for credit.

MU 141 COLLEGE CHORUS (1) Mixed voices, no audition required. Performs on and off campus at least twice each semester. Literature covers all periods of music history with emphasis on lighter works, and includes popular music. May be repeated for credit.

MU 142 MADRIGAL SINGERS (1) Mixed voices, by audition. Music for small ensemble from all periods of music history. Emphasis on the Renaissance Period and A Cappella singing. May be repeated for credit.

MU 143 THE WIND SYMPHONY (1) Open to all qualified students through the successful completion of an audition. Dedicated to the finest in wind-instrument repertory. Several concerts, both on and off campus each year. May be repeated for credit.

MU 144 ORCHESTRA (1) A College-Community Ensemble which is open to all students and interested musicians from the Greater Westfield Area. Performance of standard orchestral literature. A performance each semester. May be repeated for credit.

MU 145 JAZZ ENSEMBLE (1) A group of instrumentalists who perform arrangements in the Jazz and other popular idioms. By audition only. May be repeated for credit.

MU 146 JAZZ VOCAL ENSEMBLE (1) A group of sixteen singers and instrumentalists who perform arrangements in the Jazz and contemporary idioms. Semi-choreographed. By audition only. May be repeated for credit.

MU 240 CHAMBER ENSEMBLES (1) By special arrangement. Small ensembles structured according to student interest and available faculty expertise. Recently offered: Brass Quintet, Woodwind Quartet, Accordion Ensemble, Percussion Ensemble, Trombone Choir, Horn Ensemble, and others. May be repeated for credit.

INSTRUMENTAL CLASSES

MU 150-151, 250 PIANO CLASS (non majors) (1-1-1) (Beginner, Intermediate, Advanced) Class instruction for students with little or no keyboard experience. Emphasis is on developing functional skills at the keyboard and the ability to interpret musical notation.

MU 152-153, 252 PIANO CLASS I-III (for Music Majors) (1-1-1) A keyboard class designed to develop practical playing skills. Begins with emphasis on fundamental piano techniques, moves through emphasis on chording, accompanying, and improvising and sight reading, and concludes with the learning of assigned compositions and the development of transpositional skills.

MU 154 WOODWIND CLASS (1) The focus will be on either Flute, Oboe/Bassoon, Clarinet, or Saxophone. Involves classroom study of the particular instrument through practical experience in performance to the extent that the student can demonstrate a knowledge of the basic fundamentals of embouchure, fingerings, breathing and tone production, as they apply to the particular instrument being studied.

MU 155 BRASS CLASS (1) (Trumpet, Horn in F, Trombone, or Tuba) Classroom study of the particular instrument through practical experience in performance to the extent that the student can demonstrate a knowledge of the basic fundamentals of embouchure, fingerings, breathing and tone production as they apply to the particular instrument being studied.

MU 156 VOICE CLASS (1) A course designed to meet the needs of the non-voice major in the music major program. The class is conducted in the form of a vocal laboratory, in which the students work on the development of skills necessary for good singing.

MU 157 PERCUSSION CLASS (1) The study and acquisition of skills applicable to the various instruments of the percussion section.

MU 158 STRING CLASS (1) (Violin, Viola, Violoncello, or String Bass) Classroom study on a particular instrument. Practical experience in performance to the extent that the student can demonstrate a knowledge of the basic fundamentals of bowing, fingerings, and tone production as they apply to the particular instrument.

JAZZ STUDIES

MU 260-263 JAZZ INSTRUMENT OR VOICE I-IV (2-2-2-2) Study on the student's principal instrument of the techniques and stylistic considerations in the performance of Jazz. *Prerequisite: MU 174-177.*

MU 264 JAZZ THEORY AND ANALYSIS (3) The study of jazz-rock techniques and fundamentals including: improvisation, scales, chords, and rhythmic interpretation of jazz phrases. For Music Majors and Minors only. *Prerequisite: MU 111.*

MU 266 SMALL GROUP JAZZ WORKSHOP (1) The study of Jazz literature, current improvisational techniques and the performance practice made popular by the so-called "jam session."

MU 267-268 JAZZ KEYBOARD HARMONY I-II (1-1) Classroom piano instruction for Jazz Studies students. Emphasis on II-V-I progressions, Blues forms and other chord functions. *Prerequisite: MU 264.*

MU 360-361 STAGE BAND ARRANGING I-II (3-3) A study of writing techniques for jazz ensembles, rock groups, and other ensembles. *Prerequisites: MU 264 and MU 364.*

MU 362-363 JAZZ IMPROVISATION I-II (2-2) Classes for developing skills in harmonic, melodic, and rhythmic improvisation through performance. *Prerequisite: MU 264.*

MU 364 CONTEMPORARY HARMONIC TECHNIQUES (3) Twentieth century chordal structures including extended chords, chromatic harmony, and harmonic substitutions. The keyboard will be used and all scoring will be for piano. *Prerequisites: MU 211 and MU 264.*

MU 365 JAZZ VOCAL TECHNIQUES (3) A class for developing Jazz vocal phrasing, interpretations, and style. Scat singing is emphasized.

MU 366 JAZZ VOCAL ARRANGING (3) A class for developing writing skills for Jazz vocal solos, duets, small and large ensembles. Notation is emphasized.

MU 399 INDEPENDENT STUDY (Jazz Studies) (3-6)

APPLIED MUSIC STUDIES

Private music lessons, required of all music majors and music minors, are provided by the Applied Music Studies Faculty. *Music Majors are exempt from applied music instruction fees* for those hours specifically required for graduation, within their individual programs.

INSTRUCTION FEE: One hour, $225.00 per semester.
One-half hour, $112.50 per semester.

PREREQUISITE to all first-year MAJOR INSTRUMENT OR VOICE study is a satisfactory entrance audition.

MAJOR INSTRUMENT OR VOICE study is undertaken by each student in relation to one instrument from the following list:

Flute	Piano
Oboe	Organ
Clarinet	Accordion
Bassoon	Harpsichord
Saxophone	Classical Guitar
Horn in F	Violin
Trumpet	Viola
Trombone	Violoncello
Euphonium	String Bass
Tuba	Percussion
Voice	

The MINOR INSTRUMENT OR VOICE levels listed below are generally taken only for elective credit. Any of the above instruments may be elected for Minor study. Syllabi which detail the requirements for each level are available through a separate departmental publication. MINOR INSTRUMENT OR VOICE study does not require a Jury Examination at the end of each semester.

MU 170-173 MINOR INSTRUMENT OR VOICE I-IV 1-1-1-1

MU 270-273 MINOR INSTRUMENT OR VOICE V-VIII 1-1-1-1

Syllabi which detail the requirements for each level of MAJOR INSTRUMENT OR VOICE are available through a separate departmental publication. A Juried Examination is required for the completion of each level.

MU 174-177 MAJOR INSTRUMENT OR VOICE I-IV 2-2-2-2

MU 274-277 MAJOR INSTRUMENT OR VOICE V-VIII 2-2-2-2

MU 374-377 MAJOR INSTRUMENT OR VOICE IX-XII 2-2-2-2

MU 278 RECITAL CLASS (1) Application of platform deportment, and performance experience. Attention is given to aspects of programming works for recitals and concerts.

MU 378 SENIOR RECITAL (0) Complete public recital of solo and ensemble (optional) literature from the standard repertoire (sixty minutes minimum playing duration). *Prerequisite: A satisfactory Junior Performance; prerequisite to the Junior Performance is a Satisfactory Qualifying Examination.*

MUSICAL THEATRE

MU 180 MUSICAL THEATRE PRACTICA (1) Participation for a semester in the Musical Theatre Guild production, in one of the following capacities: (a) Director, Musical Director, Choreographer, or Conductor, (b) Major or minor lead part, (c) Chorus plus serving on one crew. May be repeated for credit. *Prerequisite: Enrollment in the Musical Theatre Concentration.*

MU 399 INDEPENDENT STUDY (Musical Theatre) (3-6).

PHILOSOPHY

Chair, John A. Loughney

Bradford Art, Lawrence C. Foard, Jr., G. E. Terrault

PHILOSOPHY MINOR

Students who wish to add significant philosophic depth to their undergraduate program may take a minor in Philosophy.

The philosophy faculty intends to provide courses to achieve the following:

- opportunities in all offerings for insight into and the methods for rigorous, carefully articulated, dynamic criticism of ideas and theories in general
- detailed, multi-level treatments of certain well-defined and traditionally important areas of thought such as political and social philosophy, ethics, logic, religion, philosophy of science, and philosophies of the human sciences
- a comprehensive range of courses outlining the development of Western philosophies and identifying significant thinkers, with a particular emphasis on modern and contemporary implications
- frequent and thorough analyses of issues which can utilize fruitfully and provocatively interdisciplinary perspectives and the application of antithetical as well as complementary theories of knowledge
- study of issues in ways which heighten and promote the continued vitality of a liberal arts education, especially the analytical and critical breadth which the humanities provide.

The Department expects to advance these goals in part by often scheduling courses on topical and timely subjects.

The courses which follow are divided into three levels, varying by degree of difficulty and requirements for entrance. Level One courses have no prerequisites and are open to all students in the College. Level Two courses generally have some form of prerequisite, though under special circumstances these may be waived. Level Three courses usually contain more difficult material; prerequisites should be expected, though not necessarily only in philosophy. In all cases, however, the instructor may waive prerequisites so as to give students opportunities to undertake a serious intellectual challenge.

PH 101 INTRODUCTION TO SOCIAL AND POLITICAL PHILOSOPHY (3) Introduction to philosophy through consideration of topics such as individualism, order vs. freedom, values within contemporary social movements, foundations of social and political life, and analyses of modern culture as expressive of social and political ideas. Special attention given to the fundamentals of critical analysis.

PH 102 INTRODUCTION TO ETHICS (3) Introduction to philosophy through consideration of classic and contemporary moral issues. Topics such as moral relativism, responsibility, the bases of systems of justice, moral consistency, and the structure and applications of ethical systems. Special attention given to the fundamentals of critical analysis.

PH 103 SYMBOLIC LOGIC I (3) Introduction to the principles and techniques of standard deductive logic: the nature of reasoning, argument, and inference; truth and validity; the application of logical rules to alternative types of deductive proof; the limits of sentence logic and an introduction to predicate logic. Attention given to the application of logic to other disciplines.

PH 104 GREAT PHILOSOPHICAL ISSUES (3) Introduction to philosophy through consideration of historically recurrent themes such as materialism, mysticism, idealism, rationalism, and empiricism. Special attention given to the fundamentals of critical analysis and the interpretation of original sources.

PH 107 MAJOR RELIGIONS OF THE WEST (3) Introduction to the history and the major doctrines of Christianity, Islam, Judaism, and Zoroastrianism. Special attention given to fundamentals of philosphical analysis of religious beliefs.

PH 108 MAJOR RELIGIONS OF THE EAST (3) Introduction to the history and major doctrines of Buddhism, Confucianism, Hinduism, Jainism, Shinto, Sikkism, and Taoism. Special attention to the fundamentals of philosophical analysis of religious beliefs.

PH 110 INTRODUCTION TO PHILOSOPHY OF SCIENCE (3) Introduction to classical and contemporary scientific world views and their respective philosphies of nature. Topics such as comparative studies of major scientific revolutions. Special attention given to the fundamentals of philosophical analysis of scientific theories.

PH 200 SPECIAL TOPICS IN PHILOSOPHY: (3) Careful analytical treatment of selected philosophical issues, perspectives, or themes chosen for their timely interest. Significant topics such as Marxism, Eastern philosophies, myth and reality, minds and machines, and philosophy and the arts (music, film, drama, literature, painting, design, or sculpture; aesthetics). *Prerequisite: 100-level philosophy course or equivalent.*

PH 201 ANCIENT PHILOSOPHY (3) Reading and discussions of such ancient thinkers as the pre-Socratics, Socrates, Democritus, Plato, and Aristotle. Special attention to a) organizing ancient philosophical thought by examining historically recurrent themes and b) considering dominant perspectives such as Ionian nature-philosophy, atomism, skepticism, and Pythagoreanism. *Prerequisite: 100-level philosophy course or equivalent.*

PH 202 MODERN PHILOSOPHY: 15TH TO 18TH CENTURIES (3) Reading and discussion of selected major Continental and British thinkers of the period such as Cusanus, Bacon, Descartes, Pascal, Locke, and Kant. Special attention given to a) organizing early modern philosophical thought by examining historically recurrent themes and b) considering crucial developments such as the New Physics, the tensions of form and experiment, and the conflict between reason, doubt, and revelation. *Prerequisite: 100-level philosophy course or equivalent.*

PH 203 MODERN PHILOSOPHY: THE 19TH CENTURY (3) Reading and disussion of selected major Continental and British thinkers of the century such as Hegel, Marx, Kierkegaard, Nietzsche, Darwin, and Mach. Special attention to a) organizing 19th-century philosophical thought by examining historically recurrent themes and b) considering trends such as Romanticism, Marxism, subjectivism, naturalism, and mechanism. *Prerequisite: 100-level philosophy course or equivalent.*

PH 206 SYMBOLIC LOGIC II (3) Careful treatment of predicate logic through the theory of relations. Introduction to philosophical logic by consideration of alternative theories of consistency and proof. Some recent investigations of the nature and varieties of paradox and their impact on reasoning and inference. Special attention given to the applications of such logics to artificial, natural, and expressive languages. *Prerequisite: PH 103 or its equivalent.*

PH 209 PHILOSOPHY OF RELIGION (3) Careful analytical treatment of the various problems of religious discourse. Significant topics such as the problem of the existence of god (or gods), the nature of religious experience, and the question of revelation. *Prerequisite: PH 107, PH 108, or equivalent.*

PH 212 PHILOSOPHY OF SCIENCE (3) Careful analytical treatment of the conceptual foundations of scientific thought. Topics such as space, time, and relativity; determinism and indeterminism; causality and chance; alternative views of explanation, theory construction, truth. Special attention given to examples selected from mathematics and/or physical sciences. *Prerequisite: PH 110 or its equivalent.*

PH 213 PHILOSOPHY AND MODERN ORGANIZATIONS: (3) Careful analytical treatment of selected modern institutions so as to understand their philosophical presuppositions, ethics, languages, orders, and impact on *and* view of the person. Topical consideration of agencies, professions, and social groups such as those involved with medicine, the law, business, psychiatry and psychology, education, and government. Under this course number might appear bio-medical, media, scientific, or legal ethics; philosphies of law or of jurisprudence, etc. *Prerequisite: 100-level philosophy course or equivalent.*

PH 214 PHILOSOPHY OF THE SOCIAL SCIENCES (3) Careful analytical treatment of knowledge in the social sciences. Comparisons with scientific criteria emphasized. Special attention given to relations between philosophical and social commitments and social-scientific methodologies. *Prerequisite: 100-level philosophy course or equivalent.*

PH 215 AMERICAN PHILOSOPHY (3) Reading and discussion of selected major American thinkers such as Cotton Mather, Edwards, Royce, Peirce, William James, Dewey, and Santayana. Special attention given to a) organizing American philosophical thought by examining historically recurrent themes (including the various religious, sociocultural, and metaphysical views of the person, the group, knowledge itself, and ultimate-value systems advanced by such philosophers) and b) considering perspectives such as idealism, utilitarianism, pragmatism, individualism, naturalism, and positivism. *Prerequisite: 100-level philosophy course or equivalent.*

PH 216 CONTEMPORARY PHILOSOPHY (3) Reading and discussion of selected thinkers of the 20th Century such as Sartre, deBeauvoir, Heidegger, Wittgenstein, Russell, Whitehead, and the "Vienna Circle." Special attention to a) organizing contemporary philosophical thought by examining historically recurrent themes and b) considering perspectives such as existentialism, phenomenology, analytic philosophy, philosophies of language, and philosophies of liberation. *Prerequisite: 100-level philosophy course or equivalent.*

PH 217 PHILOSOPHY AND FILM: Study of film esthetics and concepts in selected movies and related intellectual movements, thinkers, or filmmakers. Special emphasis on those informed by philosophical movements such as existentialism, Marxism, modernism, or postmodernism. Topics drawn from cinema dealing with ethics, social and political philosophies, religious themes, or modern metaphysics, with attention to film criticism written by 20th century thinkers with philosophical training and interest. *Prerequisites: 100-level philosophy course or equivalent.*

PH 300 SEMINAR IN PHILOSOPHY: (3) Intensive analysis of selected issues, problems, figures, or areas in philosophy. *Prerequisite: 200-level philosophy course or consent of instructor.*

PH 304 SEMINAR IN INFERENCE AND INQUIRY: (3) Intensive analysis of the structures of inference and modes of inquiry in the formal, empirical, or human sciences. Topics selected from the mathematical, physical, biological, and social sciences. Special attention given to the logical, methodological, and epistemological status of models, laws, paradigms, and theories. *Prerequisite: 200-level philosophy course or consent of instructor.*

PH 305 SEMINAR IN VALUE THEORY: (3) Intensive analysis of selected issues, problems, figures, or areas concerned with topics such as free choice, "right action," personal commitment, systems of values, and socio-cultural norms. *Prerequisite: 200-level philosophy course or consent of instructor.*

PH 306 SEMINAR IN RELIGIOUS STUDIES: (3) Intensive analysis of selected issues, problems, figures and areas within the history of *and* in the philosophical consideration of religious belief. *Prerequisite: 200-level philosophy course or consent of instructor.*

PH 333 SEMINAR IN INTERDISCIPLINARY STUDIES: (3) A seminar with intensive analysis of selected issues, problems, thinkers, or areas which can involve interdisciplinary perspectives or which raise traditionally interdisciplinary questions. Consideration of the forms, fundamental ideas, and structures of intellectual and academic disciplines. May be offered in conjunction with other departments. *Prerequisite: 200- or 300-level coursework or consent of instructor.*

PH 399 INDEPENDENT STUDY: (1 to 6 credits) Directed written or reading projects to be arranged by the student and instructor. Intensive analysis of student work. *Prerequisite: advanced work in philosophy or other disciplines.*

PHYSICAL SCIENCE

Chair, Patrick V. Romano

Peter P. Ball, Gilbert W. Billings, Samuel T. Scott, Michael Young

The Physical Science Department is a multidisciplinary department which includes physics, chemistry, electronics, geology, and astronomy. The Department offers a Bachelor of Science degree in General Science with concentrations in general science education or chemistry. The general science education concentration is designed for students who plan to teach at the middle school or junior high school level. The chemistry concentration prepares students for graduate school or employment. Graduates have obtained positions as laboratory technicians, medical technologists, and teachers. Students who choose to teach chemistry must also elect professional secondary education courses.

The department also offers a Bachelor of Science degree in Applied Chemistry. The primary emphasis of the major is the application of the principles of chemistry, physics, computer science, and eletronics to chemical instrumentation. The curriculum includes a basic study of chemistry and physics along with the various aspects of electronics and computer technology required to produce hardware and software interfaces between instruments and computers.

Housed on the third floor of Wilson Hall, the department uses ten laboratories with the latest safety features. The chemistry labs are equipped with compressed air, vacuum, gas, steam, A.C. and controlled D.C. power, and fume hoods. Several labs are equipped with modern chemical instruments and microcomputers. The department possesses infrared, ultraviolet, flame and atomic absorption spectrophotometers, gas and liquid chromatographs, and a chemical robotics system among other instruments.

REQUIREMENTS FOR APPLIED CHEMISTRY MAJOR: 63 CREDITS

Students will be asked to take Calculus I and II as part of the All College General Education Core. General Chemistry I and Physics I may also be used to fulfill the All College General Education Core. The major will be effectively reduced to 53 credit hours.

REQUIRED COURSES

PS 109 GENERAL CHEMISTRY I AND LAB (4)
PS 111 GENERAL CHEMISTRY II AND LAB (4)
PS 119 PHYSICS I AND LAB (4)
PS 121 PHYSICS II AND LAB (4)
MA 105 CALCULUS I (3)
MA 106 CALCULUS II (3)
MA 201 CALCULUS III (3)
MA 304 DIFFERENTIAL EQUATIONS (3)
PS 201 ORGANIC CHEMISTRY I AND LAB (4)
PS 203 ORGANIC CHEMISTRY II AND LAB (4)
PS 209 ANALYTICAL CHEMISTRY AND LAB (4)
PS 211 INSTRUMENTAL ANALYSIS AND LAB (4)
PS 205 PHYSICAL CHEMISTRY I (3)
PS 207 PHYSICAL CHEMISTRY II AND LAB (4)
PS 303 ANALOG AND DIGITAL ELECTRONICS AND LAB (4)
PS 301 MICROPROCESSORS AND LAB (4)
PS 306 INTRODUCTION TO INSTRUMENTATION SCIENCE AND LAB (4)

REQUIREMENTS FOR GENERAL SCIENCE CONCENTRATION: 38-39 CREDITS

This program is designed for, and recommended only to, those students planning to teach at the middle school/junior high school level. It is recommended that a student choose Precalculus I and II to partially meet the 9 hour mathematics and science portion of the Common Core. In addition, the student should choose courses from Electives which meet the professional sequence recommended by the College for secondary education.

REQUIRED COURSES:

PS 119 OR PS 115 PHYSICS I OR GENERAL PHYSICS I (4)
PS 121 OR PS 117 PHYSICS II OR GENERAL PHYSICS II (4)
PS 109 GENERAL CHEMISTRY I (4)
PS 111 GENERAL CHEMISTRY II (4)
PS 133 ASTRONOMY
PS 104 and PS 105 GEOLOGY AND LAB (4)

Plus two courses selected from the following three:

BI 102 ENVIRONMENTAL BIOLOGY (3)
BI 104 BIOLOGY OF ORGANISMS (4)
BI 106 INHERITANCE AND DEVELOPMENT (4)

Plus 8 credit hours of electives from physical or biological science, science education or mathematics courses.

REQUIREMENTS FOR THE MINOR IN GENERAL SCIENCE

Physical Science or Introduction to Physics	4
Environmental Biology or Biology oF Organisms	4
Introduction to Chemistry or General Chemistry I	4
Science for Elementary School or Science for Middle School/Junior High	3
Geology Lecture and Lab	4
Astronomy	3
Total	21-22 hours

The General Science minor is designed to fulfill the new regulations requiring Elementary Education students to take a minor. The General Science Minor provides a broad background in science for those Elementary Education students wishing to minor in science. Students taking this minor will be prepared to teach science either in a self-contained classroom or as a science specialist in a departmentalized situation.

REQUIREMENTS FOR CHEMISTRY CONCENTRATION: 40 CREDITS

It is recommended that a student choose Calculus I and II to fulfill partially the nine hour math and science portion of the Common Core. A student who does not feel sufficiently prepared to undertake calculus should take Precalculus I and II. A biology course is recommended to fulfill the remaining portion of this part of the General Core.

REQUIRED COURSES:

PS 119 OR PS 115 PHYSICS I OR GENERAL PHYSICS I (4)
PS 121 OR PS 117 PHYSICS II OR GENERAL PHYSICS II (4)
PS 109 GENERAL CHEMISTRY I (4)
PS 111 GENERAL CHEMISTRY II (4)
PS 201 ORGANIC CHEMISTRY II (4)
PS 203 ORGANIC CHEMISTRY II (4)
PS 209 ANALYTICAL CHEMISTRY (4)
PS 211 INSTRUMENTAL ANALYSIS (4)

Plus 8 credit hours of electives from Physical Chemistry, Bio-Chemistry and Theoretical and Experimental Research.

If a student should use any of the above Major courses for credit in the General Core, the number of credit hours needed for the concentration would be reduced accordingly and additional courses would be taken to attain the number of total credits required for a degree.

It is expected that students, in consulation with a departmental advisor, will choose a portion of their electives from course offerings in chemistry, physics, biology, computer science, and mathematics. Stu-

dents wishing to obtain ceritfication to teach chemistry should use electives to meet the Professional Sequence for secondary education recommended by the College.

CHEMISTRY MINOR

In addition to the concentrations within the major, the Department offers a minor in chemistry. A chemistry minor must initially take General Chemistry I and II. An additional 10 credit hours is then required from the following courses:

Organic Chemistry
Analytical Chemistry
Instrumental Analysis
Physical Chemistry
Biochemistry

COURSES

PS 101 PHYSICAL SCIENCE (4) Includes the basic concepts of physics such as elementary study of mechanics, heat, sound, light, magnetism, and electricity, along with introductory topics in Earth-Space science and Chemistry. Three lectures and one double-period laboratory session (PS 102) per week.

PS 102 PHYSICAL SCIENCE LABORATORY *Required with PS 101.*

PS 104 GEOLOGY (3) A systematic examination of the rocks and minerals which compose the earth's crust and the processes of weathering and erosion which sculpture the crust. Structural, tectonic, and other long-term activities are investigated. 3 hours lecture per week. May be taken without laboratory.

PS 105 GEOLOGY LABORATORY (1) A three-hour laboratory session correlated with Geology PS 104. Includes rock and mineral identification, use of topographic maps, and a number of weekend field trips. A student enrolled in Geology Laboratory PS 105 must take PS 104 concurrently or must have taken it previously.

PS 107 INTRODUCTION TO CHEMISTRY (4) A one-semester course consisting of a broad look at fundamental concepts of modern chemistry. Topics studied will include atomic and molecular structure, physical and chemical changes, acid-base chemistry, organic chemistry, and biochemistry. These concepts will be applied to the examination of our energy picture, environmental, chemical technological processes, and other related matters. 3 hours lecture. *Required wth PS 108.*

PS 108 INTRODUCTION TO CHEMISTRY LABORATORY A 3-hour laboratory session allowing students to develop laboratory technique in relationship to the study of chemistry. *Required with PS 107.*

PS 109 GENERAL CHEMISTRY I (4) A broad look at the fundamental concepts of modern chemistry including the mole concept, stoichiometry, heat, the periodic table, atomic structure, bonding, gas phase chemistry, and organic chemistry. *Required with PS 110.*

PS 110 GENERAL CHEMISTRY LABORATORY I A 3-hour required laboratory session will correlate lecture materials with laboratory technique. One laboratory session is scheduled per week for each student. *Required with PS 109.*

PS 111 GENERAL CHEMISTRY II (4) A continuation of General Chemistry I. The topics covered include solid, liquid and solution chemistry; chemical equilibrium; chemical kinetics and chemical reactions; acid-base theory; electrochemistry; nuclear chemistry; and selected topics. *Prerequisite: PS 109. Required with PS 112.*

PS 112 GENERAL CHEMISTRY LABORATORY II A 3-hour required laboratory session will correlate lecture material with laboratory technique. One laboratory session is scheduled per week for each student. *Required with PS 111.*

PS 113 INTRODUCTION TO PHYSICS (4) Designed to introduce students to some of the phenomena and methods of inquiry which are part of physics. Subject content will be selected primarily from modern areas of physics which illustrate the fundamental physical laws, and which lend themselves to applications in the life sciences and other physical sciences. Much of the lab work will utilize a "discovery" approach. 3 hours lecture — recitation, 2 hours lab (PS 114) per week.
Note: This course is a required prerequisite to General Physics or Physics I for those students who have not had high school physics.

PS 114 INTRODUCTION TO PHYSICS LABORATORY. *Required with PS 113.*

PS 115 GENERAL PHYSICS I (4) The course includes a study of the principles of mechanics, heat, and sound and the application of these principles to the physical phenomena of the universe. Three hours laboratory per week.

PS 116 GENERAL PHYSICS I LABORATORY (required with PS 113).

PS 117 GENERAL PHYSICS II (4) A continuation of General Physics I. The course deals with the laws governing light, magnetism, and electricity, together with their applications in the contemporary world. Three hours laboratory per week. *Prerequisite: PS 113.*

PS 118 GENERAL PHYSICS II LABORATORY (required with PS 115).

PS 119 PHYSICS I (4) The class meets for 3 hours of lecture/week and three hours of laboratory/week. Topics include: a description of motion, kinematics, Newton's Laws, force, work, and energy, momentum, angular momentum, the conservation laws, heat and an introduction to thermodynamics. The use of elementary calculus to solve problems involving trajectories, work, and one-dimensional potentials will be stressed. Vectors, scalar products, and vector cross products will be introduced. *Corequisite: Calculus I. Required with PS 120.*

PS 120 PHYSICS I LABORATORY *Required with PS 119.*

PS 121 PHYSICS II (4) This course has 3 hours of both lecture and lab per week. Topics include: electrical forces, Coulomb's Law, electric fields, potentials and currents, Kirschoff's laws, magnetic induction, electromagnetic induction, energy in electric and magnetic fields, capacitors, inductors, oscillations, and resonant circuits, an introduction to Special Relativity Theory. Mathematically this course introduces the student to simple 2 and 3 dimensional potential problems, illustrates the use of different coordinate systems, and develops some important applications of the elementary transcendental functions. *Prerequisite: Calculus II. Required with PS 122.*

PS 122 PHYSICS II LABORATORY *Required with PS 121.*

PS 131 SCIENCE FOR THE MIDDLE SCHOOL/JR. HIGH SCHOOL (3) Designed to prepare future teachers of middle school/junior high school science to use the student-inquiry oriented approach to teaching science. Emphasis will be placed on the National Science Foundation funded science programs designed for the middle school/junior high school. (TSM, IPS, PSII, SCIS, ES, IME, IMB, BSCS, ESS, and IIS). *Prerequisite: 3 credits in biology, 3 credits in the physical sciences.*

PS 132 INTRODUCTION TO ELECTRONICS (3) Designed for students with little or no previous experience in electronics. Subject matter will include basic electricity (voltage, current, power), passive circuit elements (resistors, capacitors, inductors), an introduction to active elements, and measurements techniques using oscilloscopes and meters. Laboratory work will be integrated and will also deal with practical techniques for design, construction and repair of power supplies and simple audio circuits. An introduction to integrated circuits (op amps, TTL logic circuits) will be given. The class will meet for 4 hours per week in a combination of lecture and lab work.

PS 133 ASTRONOMY (3) A broad introductory survey of astronomy. Topics to be covered include history of astronomy, the night sky, the Earth and Moon, the solar system, spacecraft exploration of the planets, stars and stellar evolution, supernovae, pulsars, black holes, the Milky Way, galaxies, quasars, and cosmology. Students will be expected to become familiar with the major constellations. Several optional observing sessions will be held on clear evenings.

PS 137 INTRODUCTION TO DIGITAL ELECTRONICS (3) This course is intended for students majoring in one of the sciences (Computer Science, Biology, Psychology, or General Science) or others who might expect a knowledge of basic electronics, digital logic and practical instrumentation to be useful. Basic electricity, electrical measurements, and electronic components including integrated circuits will be introduced. The course will emphasize applications using numerous practical or computer related activities.

PS 139 FLIGHT TECHNOLOGY I (2) An introductory course using ground training to provide the student with the aeronautical knowledge to meet the prerequisite specified by Federal Aviation Regulations for the Private Pilot Written Examination. Topics covered in the course include: federal aviation regulations, pilot and medical certificates, pilot logbook, aircraft preflight inspection, elementary maneuvers, airports, communications, flight controls, weather theory, altimetry, and aircraft performance, emergency procedures, flight rules and airport operations, flight navigation, aeronautical information publications, and aircraft performance.

PS 140 FLIGHT TECHNOLOGY II (2) An introductory course providing the student with the aeronautical experience necessary to meet the requirements for a F.A.A. private pilot certificate with airplane category and single engine land class rating. Topics covered in the course include: introduction to the aircraft, basic radio procedures, engine operation, taxi, take-offs, in-flight maneuvers, landings, traffic patterns and airport operations, cross country procedures and navigation, airplane servicing, emergency procedures, aircraft check lists, collision avoidance, systems failure procedures, wake turbulence avoidance, radio navigation, night flight procedures, weather avoidance and flight planning. *Corequisite or prerequisite: PS 139.*

PS 201 ORGANIC CHEMISTRY I (4) A survey of general organic chemistry. Preview of chemical principles; the structure, nomenclature, properties and uses of aliphatic and aromatic compounds. Discussion includes the isolation and identification of organic compounds, nucleophilic displacement and elimination reactions and organometallic compounds. *Prerequisite PS 111: Required with PS 202.*

PS 202 ORGANIC CHEMISTRY I LABORATORY A 3 hour laboratory introducing the student to the techniques of the organic chemist including distillation, recrystallization, extraction, determination of physical properties for identification and introduction to organic sythesis. *Required with PS 201.*

PS 203 ORGANIC CHEMISTRY II (4) The continuation of Organic Chemistry I. The chemistry, properties and uses of alcohols, ethers, aldehydes, ketones, and organic acids are studied. Optical Isomerism is discussed. Carbohydrates, amino acids, proteins, and related biological processes are considered in emphasizing the life sciences and biochemical reactions. *Prerequisite: PS 201. Required with PS 204.*

PS 204 ORGANIC CHEMISTRY II LABORATORY *Required with PS 203.*

PS 205 PHYSICAL CHEMISTRY I (3) Deals with the properties, structures, theories, and laws of matter. Detailed study will occur in the areas of the gas laws, Kinetic-molecular theory, atomic and molecular structure, thermodynamics, thermochemistry, hysical and chemical equilibrium, and chemical bonding. *Prerequisite: PS 111 or equivalent.*

PS 207 PHYSICAL CHEMISTRY II (4) A continuation of Physical Chemistry I. Topics include chemical kinetics, liquid and crystal theory, phase equilibria, solution chemistry, electrochemistry, and selected topics. *Prerequisite: PS 205. Required with PS 208.*

PS 208 PHYSICAL CHEMISTRY LABORATORY II A 3 hour laboratory session will correlate lecture material with laboratory technique. *Required with PS 207.*

PS 209 ANALYTICAL CHEMISTRY (4) Consists of lectures, discussions, and laboratory work, covering the fundamentals of analysis. Study includes gravimetric analysis, volumetric analysis, and the statistical treatment of data. A main aspect of lecture will be the application of equilibrium to acid-base, precipitation, redox, and complex formation reactions. An important objective of the laboratory is the development of good laboratory technique. 3 hours lecture, 3 hours laboratory (PS 210) per week. *Prerequisite: PS 111.*

PS 210 ANALYTICAL CHEMISTRY LABORATORY *Required with PS 209.*

PS 211 INSTRUMENTAL ANALYSIS (4) Consists of lectures, discussions, and laboratory work covering the fundamentals of analysis. Emphasis will be on modern methods of instrumental analysis. 3 hours lecture, 3 hours laboratory. (PS 212) per week. *Prerequisite: PS 209.*

PS 212 INSTRUMENTAL ANALYSIS LABORATORY *Required with PS 211.*

PS 213 BIOCHEMISTRY (3) The first portion of this course will study important biochemicals including water, amino acids, peptides, proteins, enzymes, carbohydrates, lipids, and nucleotides. The latter portion will examine the relationship of these compounds to bioenergetics, glycolysis, the tricarboxylic acid cycle, electron transport, oxidative phosphorylation, fatty acid oxidation and biosynthesis, carbohydrate biosynthesis, nitrogen and amino acid metabolism, protein synthesis, and photosynthesis. An effort will be made to correlate the various metabolic pathways with the cells and organelles of biological systems. Special topics may be covered if time should be available. 3 hour lecture. *Prerequisite: PS 201.*

PS 214 BIOCHEMISTRY LABORATORY (1) A three-hour laboratory session allowing students to develop laboratory technique in relationship to the study of biochemistry.

PS 223 PHYSICS SEMINAR (3) The purpose of this seminar is to investigate selected topics of interest in either theoretical or experimental physics. Possible theoretical topics of interest are: methods of mathematical physics, numerical methods and computational physics, characteristic (partial) differential equations of physics and their solutions, and advanced topics such as application of group theory in physics, topics in many-body theory physics and solid state physics. Possible experimental topics of interest are: advanced electronics, digital logic circuits, solar heating apparatus, topics in biophysics, instrumentation of spectroscopy. Assuming different topics are offered, an interested student may take the seminar twice. *Prerequisite: Physics I, Physics II, Calculus I, Calculus II, and permission of instructor.*

PS 229 THEORETICAL AND EXPERIMENTAL RESEARCH (1-3 per semester) A total of 6 credits may be applied toward the undergraduate degree. The course involves independent study in a physical science with the student performing a laboratory or theoretical research project under the supervision of an instructor. *Prerequisite: departmental approval.*

PS 301 MICROPROCESSORS AND MICROCOMPUTERS (3) Deals with the arthitectures, instruction sets, and applications of microprocessors and microcomputers. The emphasis will be on computer hardware at the chip level. Interfacing to the bus and to special I/O chips will be introduced. Students will design and implement simple interfaces for data acquisition and control. The software content of the course will include the use of machine language monitors and assemblers, and linking machine language routines to high level languages such as BASIC and LOGO. Most applications will be to the 6502 and 8088 microprocessors and families, but other microprocessors and single chip microcomputers will be considered. *Prerequisites: PS 137 and any programming course.*

PS 303 ANALOG AND DIGITAL ELECTRONICS (4) Designed to acquaint the student with a wide variety of digital and analog circuit techniques using commonly available low cost integrated circuits. Analog, elements such as op amps, CD amplifiers, timers, multipliers and phase locked loops will be used to demonstrate analog computing techniques such as integration, summing, and differentiation, and other analog methods such as filtering, modulation, and demodulation etc. Transducers such as light sensitive resistors, thermisters etc. will be used. Digital techniques for timing, counting, and arithmetic will be studied using TTI and CMOS integrated circuits. The revolutionary new technology for digital computation (Microprocessors) will be assessed. Combined lecture-lab will be 5 hours a week. *Prerequisite: PS 121 or PS 132.*

PS 306 INTRODUCTION TO INSTRUMENTATION SCIENCE (4) The course will survey and acquaint the student with the general principles of instrument design and operation. Topics to be studied include signal theory, information-handling processes, transformation processes, instruments as systems, models of instruments, instrument design and errors. Applications will be to chemical instrumentation. Each student will carry out a design of a project involving an interface (software and hardware) between one of the available instruments (infrared spectrometer, ultra-violet visible spectrometer, polarograph, gas and high pressure liquid chromatographs, nuclear magnetic resonance spectrometer, atomic absorption spectrometer) and a computer or microcomputer. Students will be required to read and report on current instrumentation presented in recent literature or at instrumentation trade shows. Combined lecture-lab will be 5 hours a week. *Prerequisites: PS 211 and PS 301.*

PS 304 SEMINAR IN APPLIED CHEMISTRY (1) A series of lectures by invited chemists active in non-academic laboratories (e.g., industrial, government, hospital). Sponsored jointly with the Cooperating Colleges of Greater Springfield (CCGS). The course will be offered only on a pass/fail basis. *Prerequisite: PS 111.*

PS 399 INDEPENDENT STUDY (3-6)

POLITICAL SCIENCE

Chair, Andrew Raposa

Weston A. Dyer, Michael Engel, Erika Pilver, Brian Steinberg

The Department of Political Science offers five concentrations: Law, U.S. Politics, Public Administration, International Studies, and Interdisciplinary Law and Legal Studies. The internship program, a key element in the department's offerings, features 3 to 6 credit placements locally and in Boston and a 15-credit program in Washington, D.C. Each year, the International Relations Club participates in a model United Nations in New York City and often in other models as well. The department also sponsors a local chapter of the national honor society in Political Science, Phi Sigma Alpha.

Political scientists learn to think critically and analytically and to apply a broad understanding of the nature of politics to the important questions of our time. A major in Political Science — alone or in combination with another major — not only prepares you for careers in law or government, but also provides you with skills necessary in a wide range of other professional and managerial positions.

BACHELOR OF ARTS IN POLITICAL SCIENCE: 36 CREDITS

The Political Science Major has four regular tracks and one interdisciplinary track. The program permits the student to study with or without an internship in his/her choice of American politics, Public Administration, International Studies, Pre-Law, or Interdisciplinary Law and Legal Studies. Internships, through not mandatory, are usually available in all tracks.

REQUIREMENTS

1. Nine credits of required courses including American National Government Research and Methodology, and one other course selected from the following six:
   STATE AND LOCAL GOVERNMENT
   POLITICAL THEORY I OR II
   COMPARATIVE EUROPEAN GOVERNMENT
   URBAN POLITICS
   CONSTITUTIONAL LAW
2. Twelve credits in one of four tracks in political science or 18 hours in the Interdisciplinary Law and Legal Studies track.
3. Fifteen credits of additional political science course.

MAJOR FIELDS OF CONCENTRATION

Note: Special Topics and Internships may be offered in any of the following five tracks:

Track 1: International Studies
COMPARATIVE EUROPEAN GOVERNMENT
INTERNATIONAL RELATIONS
AMERICAN FOREIGN POLICY
POLITICAL CHANGE AND DEVELOPMENT
COMPARATIVE IDEOLOGIES
POLITICAL THEORY I
POLITICAL THEORY II
AMERICAN POLITICAL THOUGHT
COMPARATIVE COMMUNIST SYSTEMS

Track 2: Public Administration
BUREAUCRATIC POLITICS
INTRODUCTIION TO PUBLIC ADMINISTRATION
PUBLIC MANAGEMENT SKILLS
STATE AND LOCAL GOVERNMENT
ADMINISTRATIVE LAW
POLITICS OF BUDGET-MAKING
URBAN POLITICS

Track 3: Pre-Law
CIVIL LIBERTIES
CONSTITUTIONAL LAW
ADJUDICATION OF SOCIAL SYSTEMS
COMPARATIVE JUDICIAL SYSTEMS
ADMINISTRATIVE LAW
LEGAL ADVISING

Track 4: American Politics

EXECUTIVE AND LEGISLATIVE POLITICS
AMERICAN POLITICAL PROCESS
PUBLIC POLICY
URBAN POLITICS
AMERICAN POLITICAL THOUGHT
AMERICAN FOREIGN POLICY

CONSTITUTIONAL LAW
POLITICS OF RACE AND ETHNICITY
STATE AND LOCAL GOVERNMENT

Track 5: Interdisciplinary Law and Legal Studies
Phase I
CIVIL LIBERTIES
CONSTITUTIONAL LAW
ADJUDICATION OF SOCIAL ISSUES
ADMINISTRATIVE LAW
Phase II
SYMBOLIC LOGIC (PH 103)
RESEARCH AND METHODOLOGY (LEGAL MODULE) (PL 206)
PRINCIPLES OF EVIDENCE AND PROOF (CJ 305) **or** PRINCIPLES OF INVESTIGATION (CJ 204)
Phase III
ENVIRONMENTAL LEGISLATION (BI 223)
BUSINESS AND CONSUMER LAW (MG 241)
LABOR RELATIONS (MG 301)
THEORIES AND SOURCES OF CRIMINAL LAW (CJ 203)
CIVIL LIABILITIES FOR CRIMINAL JUSTICE PROFESSIONALS (CJ 316)
BROADCAST LAW (MS 307)
PHILOSOPHY OF LAW AND LEGAL SYSTEMS (PH 305)
COMPARATIVE JUDICIAL SYSTEMS (PL 315)

About Track 5

The four courses in the first phase are required. The student may take either Symbolic Logic, Research and Methodology (Legal Module), or Evidence/Investigations in the second phase and one of the different Law specialty courses offered by other departments of the College for the third phase.

If the student selects PL 206 Research and Methodology (Legal Module) he or she will be permitted to take an additional two courses: either one of the two in the second phase (Symbolic Logic or Evidence) and a specialty Law course from the third phase; or two specialty courses from the third phase.

A student may decide to select all three courses from the second phase (Symbolic Logic, Research and Methodology, and Evidence) and omit the third phase.

The 18-credit concentration including the non-political-science courses will count toward the 36-credit major in Political Science.

MINOR: 18 CREDITS

Students in such fields as economics, business administration, history, psychology or criminal justice often find the option of a minor in political science particularly attractive. Students who wish to minor in political science are required to take 18 credits of courses within the Department. An internship may make up part of the 18 credits if the student qualifies for such a program and receives such an assignment.

URBAN STUDIES CONCENTRATION

The student who wishes to be a political science major (36 credits) with a minor in Urban Studies (18 credits) may take any track either with or without an internship. The student should choose his/her required additional 18 credits in other departments with the assistance of his/her advisor. These credits may be selected in such areas as: history, mathematics, geography and regional planning, education, economics, sociology, business administration and psychology.

COURSES

PL 101 AMERICAN NATIONAL GOVERNMENT (3) Fundamental course dealing with the constitution, congress, president, courts, and political party systems of the American National government.

PL 103 STATE AND LOCAL GOVERNMENT (3) Fundamental course dealing with the powers, organization, functions and intergovernmental relations of the state, country, municipality and other local governments.

PL 204 INTRODUCTION TO PUBLIC ADMINISTRATION (3) The relationship of the administrative branch of government to other branches in the making and implementation of public policy, theories of government organization for efficient administration, problems of budgeting, personnel, merit systems, types of agency organization, popular control over the bureaucracy.

PL 205 URBAN POLITICS (3) Exemplifies the areas of "urban problems" in the context of leading political science theories, and in turn examines these writings in light of contemporary developments in the cities.

PL 206 RESEARCH AND METHODOLOGY IN POLITICAL SCIENCE (3) An examination of the nature and methods of political science. It deals with the meaning of and relationship between "Politics" and "Science," the types of questions raised in studying behavioral and political science, and the methods used in reaching answers.

PL 207 ADMINISTRATIVE LAW (3) Law concerning the powers and procedures of administrative agencies and the part they plan in setting and rejecting governmental policy. Special attention is put on the courts' role in mediating agency actions and their constitutionality within the branches of the federal government.

PL 209 INTERNATIONAL RELATIONS (3) An introduction to the nation-state system and conceptions of national interest in modern world politics. The forms and distribution of power by which states seek to implement national interest. The making of foreign policy and methods of adjusting international conflict. Emphasis on current international problems.

PL 210 COMPARATIVE EUROPEAN GOVERNMENT (3) The institutional approach will be employed to the study of the governments of England, France, Italy, Germany, and the Soviet Union. The institutional approach considers the organizations of governments, their constitutional basis, their sources of legitimacy, and their methods of operation. This approach seeks to understand the workings of governments by an analysis of these components.

PL 211 COMPARATIVE FOREIGN POLICY (3) The nation-state and its power relationships with other states and international organizations, regional and global. A theoretical study of the cultural, ideological, economic, institutional, and personality influences on the foreign policy of particular countries. The country studied will change from semester to semester. Students may therefore enroll for the course more than once. *Prerequisite: PL 101.*

PL 301-302 POLITICAL THEORY, I, II (3 each) Selected issues in the history of political thought with emphasis on their pertinence to ancient and recent political, economic, and social problems.

PL 304 AMERICAN POLITICAL ISM's (3) Analysis of the origin and function of theory and ideology in the American political and institutional experience with regard to such categories as: Conservatism, Liberalism, Socialism, Elitism, and Managerialism (political economy). Special emphasis will be placed on the contemporary impact of such ideological labels.

PL 305 AMERICAN FOREIGN POLICY (3) Constitutional, political, ideological, and administrative considerations which influence the formulation and execution of American foreign policy. Special emphasis on current issues.

PL 306 THE AMERICAN POLITICAL PROCESS (3) A study of how the political ideas, values, and goals of the American people are expressed through the machinery of American politics; parties, elections, interest groups and social movements.

PL 307 EXECUTIVE AND LEGISLATIVE POLITICS (3) The origins, development, and functions of the executive and legislative branches of American Government. The study of the impact of social structure and the economic system on these institutions. Analysis and discussion of their power relationships and their place in American politics.

PL 308 CONSTITUTIONAL LAW (3) The Federal system under the Constitution of the United States, judicial review in constitutional cases, state and local rights and responsibilities.

PL 309 CIVIL LIBERTIES (3) Selected cases dealing with constitutionally protected rights of speech, press, and assembly, as well as with court created rights.

PL 313 GOVERNMENT AND POLITICS IN THE SOVIET UNION (3) The development, organization and functioning of the Communist party; governmental organizations and the administrative process; terror as a system of power; organization for government control in industry and agriculture; Soviet foreign policy; its formation and execution.

PL 314 COMMUNIST SYSTEMS (3) An innovative course to relate general comparative politics theory to the study of Communist political systems; their conceptualization from totalitarian, structural-functional, and Marxist-Leninist perspectives; their similarity and diversity across geographic, cultural, and developmental lines.

PL 315 COMPARATIVE JUDICIAL SYSTEMS (3) A study of selected countries' judicial systems dealing with each system's origins, development, and the kinds of cases which the system is called upon to adjudicate.

PL 316 ADJUDICATION OF SOCIAL ISSUES (3) A study of the extensive changes in the American social, economic, and political structure brought about within the framework of the judicial process.

PL 317 COMPARATIVE IDEOLOGICAL SYSTEMS (3) An examination of the major theoretical foundations of communism, fascism, democracy and socialism. A study of ideological doctrines and institutional patterns and their consequences and prospects for the future.

PL 318 PUBLIC MANAGEMENT SKILLS (3) Emphasizes those areas most important to administration, including in-depth work in public budgeting and finance skills; details of public personnel activities and problems (recruiting, hiring, training, promotions, etc.); various facets of public relations, ranging from inter-organization communication to dealing with media; leadership, decision-making and supervision. Draws from contemporary examples.

PL 319 BUREAUCRATIC POLITICS (3) Includes various theories of organization, but emphasizes the organization's place in the U.S. political system; that is, the partisan political and the interest group politics which shape the public programs at all levels of government.

PL 320 POLITICS OF BUDGET-MAKING (3) Deals with federal, state, and local budgets, how they are made, who influences the decisions, and the implications of those decisions.

PL 321 ISSUES IN U.S. POLITICS (3) Analysis of conflict and decision-making in specific policy areas. These will change from semester to semester and will include, among others, energy, employment, defense, economic policy, education, and race and ethnicity. Students may therefore enroll for the course more than once. *Prerequisite: PL 101 or PL 103 or equivalent.*

PL 323 SELECTED TOPICS IN POLITICAL SCIENCE (3) A study of basic political and intellectual forces shaping contemporary world politics. Information concerning past events, issues, movements, and personalities are subjected to reinterpretation in the light of recent scholarship. *Prerequisite: PL 101.*

PL 324 THIRD WORLD POLITICS (3) Comparative analysis designed for the student interested in general problems of politics and development in the third world; concepts are drawn from several analytical approaches and are applied to case studies of African, Asian, and South American countries. *Prerequisite: six credits in social science or equivalent.*

PL 397 POLITICAL SCIENCE INTERNSHIP (3 or 6) Provides experience in a local, regional or state governmental office. Daily journal and semester paper required.

PL 398 WASHINGTON INTERNSHIP (15) A semester in the nation's capitol serving in a public service office at a junior entrance level. One evening course included. Daily journal and semester paper required.

PL 399 INDEPENDENT STUDY

PSYCHOLOGY

Chair, William F. Duval

Alvin I. Cohen, Joseph Connolly, Joan Corell, Suzanne E. Davis, Susan Dutch, Jeffrey Flatt, Robert Goodale, Ricki Kantrowitz, Horace Marchant, Valerie Melburg, Joseph F. Perez, Jack Szpiler, Beverly D. Tatum.

The Psychology major combines a theoretical introduction to the major fields of psychology as well as a practical curriculum designed to prepare students for further graduate study or for a career in psychology-related fields. In addition, it is not unusual to find students with a srong psychology background employed in business and personnel areas. Many students pursue double majors with Criminal Justice, Economics/Business Management, and Computer Science.

The Department houses laboratories and equipment for experimental work in both animal and human learning. A practicum course is also regularly offered in conjunction with area human service agencies, schools, and businesses. The Center for Psychological Services, staffed by faculty from the Department, provides free, confidential counseling to members of the college community. There is also a peer counseling group for which selected students may earn academic credit.

REQUIREMENTS FOR PSYCHOLOGY MAJORS

Psychology majors must take at least 36 hours within the Department. Required courses include:

3 sh General Psychology — prerequisite to all other psychology courses

3 sh Research Methods — prerequisite for all "natural science" psychology courses expected for all other psychology courses. This course should be taken in the semester following General Psychology

18 sh — *2 courses* from each of the groups below:
"Natural Science" — Basic Principles of Learning, Physiological Psychology, Comparative, Cognitive, Statistics, Experimental Design, Cognition or Perception
"Social Science" — Personality, Abnormal, Child, Psychology of Adolescence, Social, Psychology of Family
"Applied" — Behavior Modification, Educational Psychology, Industrial Psychology, Psychology of Interpersonal Relations and Communications, Theories of Counseling, Counseling Theory and Practice

12 sh — electives in Psychology — any psychology courses

36 sh total

COURSES

PY 101 GENERAL PSYCHOLOGY (3) Overview of the basic theories and facts of human behavior and mental life. Topics include the scientific method, the physiological bases of behavior, sensation and perception, learning and memory, development, personality, social psychology, and abnormal behavior. Psychological knowledge is related to daily problems and everyday life. This course is a prerequisite to all other psychology courses.

PY 105 RESEARCH METHODS IN PSYCHOLOGY (3) Introduction to the scientific method as utilized in psychology. Students are given laboratory experience at carrying out simple research. Lectures cover the concepts of an hypothesis, an experiment, control procedures, law, and theory. The course focuses on research methods, experimental techniques, and a mention of the basic statistical concepts as they are utilized in research on developmental, social, clinical, and personality psychology; the psychology of perception, cognition, and learning. This course is required of all psychology majors. *Prerequisite: PY 101 (This course should be taken the semester after completion of General Psychology).*

PY 200 INDUSTRIAL AND ORGANIZATION PSYCHOLOGY (3) Concerns the application of psychological principles to the problems of people operating within business or industry. Includes such topics as the nature of organizations, effective leadership styles, communication skills, group dynamics, and the role of leisure time. *Prerequisite: PY 101.*

PY 201 THEORIES OF PERSONALITY (3) The major theories of personality, including those of Freud, Jung, Sullivan, Allport, and Rogers, and the evidence used to support them. Comparisons and contrasts of these theories are made and implications drawn will be discussed and applied to counseling, psychotherapy, and education. *Prerequisite: PY 101.*

PY 201 CHILD PSYCHOLOGY (3) The systematic study of the organismic and psychological changes in the child from birth up to adolescence, and of the importance of maturation, growth, and social learning in effecting these changes. Attention is focused on factors in personality, emotional, and cognitive development. Several lectures cover psychological theories of child development as based on available research data. *Prerequisite: PY 101.*

PY 203 ADOLESCENT PSYCHOLOGY (3) Course concerns the adolescent period of life. Lectures cover the various aspects of development: physical, intellectual, social, emotional, and sexual. Several lectures involve the interpersonal aspects of the life of adolescents, including family, peer, and school relationships, vocational choice, and the self-concept. Also covered are various psychological theories of adolescent development as based on available research data. *Prerequisite: PY 101.*

PY 204 SELF-CONTROL AND STRESS MANAGEMENT (3) The concept of self-control will be examined from various psychological perspectives (e.g., behavioral, psychoanalytic, and humanistic), and a technology of self-control procedures will be introduced which have application to a wide range of clinical problems. The determinants of stress and its manifestations — physiological, behavioral, and cognitive — will also be examined together with procedures for stress management, including relaxation techniques, meditation, biofeedback, and cognitive-behavioral strategies. *Prerequisite: PY 101.*

PY 205 CAREER PLANNING AND DEVELOPMENT (3) Designed to familiarize students with the major theories of career choice, to enable them to learn a self-assessment process in relation to career opportunities, and to develop flexible strategies for achieving and managing a satisfactory career. The course will also include a discussion of various problems associated with different career opportunities such as technological and social change, value conflicts, dual-career couples and adult developmental needs. *Prerequisite: PY 101.*

PY 206 EDUCATIONAL PSYCHOLOGY (3) The study of the psychological concepts in educational practices, including the nature and sources of individual differences and readiness, learning theories, motivations, emotions, and the evaluation of learning techniques. *Prerequisite: PY 101.*

PY 303 ABNORMAL PSYCHOLOGY (3) The etiology, development, and therapy of mental disorders. Stress will be on the psychodynamics of pathological behavior. Consideration will be given to various forms of unusual behavior ranging from anxiety states to psychosis. Analysis of pathological behavior will be based on current theories of maturation, emotion, and personality organization. *Prerequisite: PY 101, PY 201.*

PY 304 SOCIAL PSYCHOLOGY (3) The individual's behavior and cognition in the social setting. Social psychology includes the processes of interaction, enculturation, prejudice, attitudes, and a psychological analysis of social institutions such as church, family, and school. *Prerequisite: PY 101.*

PY 306 BASIC PRINCIPLES OF LEARNING (3) An introduction to the terminology, concepts, and methods in the study of learning. An examination of principles in terms of early and contemporary inquiries and experiments. The focus is on classical and instrumental conditioning, generalization, and discrimination processes. Designed for students who major or concentrate in psychology. *Prerequisite: PY 101, PY 105.*

PY 308 STATISTICS FOR PSYCHOLOGISTS (3) The application of statistical methods to current research problems in psychology. The selection of procedures appropriate to problems, performance of the procedures, interpretation of outcomes, data tabulation and reduction, measures of central tendency and variability, correlation and prediction, tests of significance, t-test, chi square and analysis of variance. *Prerequisite: PY 101, PY 105.*

PY 309 EXPERIMENTAL DESIGN (4) A full year course in the methods and theory of experimental psychology, stressing selected topics from the areas of sensation, perception, and learning. A thorough grounding in laboratory methods in focus of this course. Each student will be required to design, conduct, and interpret experiments in the major areas under consideration. Two lectures and two laboratory periods per week. Psychology majors only. *Prerequisite: PY 101, PY 105, PY 308.*

PY 312 PHYSIOLOGICAL PSYCHOLOGY (3) The focus is on the study of the physiological correlates of behavior. Special attention will be given to the physiological and neural aspects of emotions, motivation, and learning. Psychophysiological factors of health, disease, psychosomatics, and chemotherapy will be included. *Prerequisite: PY 101, PY 105.*

PY 313 COMPARATIVE PSYCHOLOGY (3) A study of the similarities and differences in the behavior of animals, ranging from the unicellular to non-human primates. The course will stress comparative learning, but aspects of such topics as instinctive behavior, psychophysiology, and social behavior will also be discussed. Psychology majors only. *Prerequisite: PY 101, PY 105.*

PY 314 HISTORY AND SYSTEMS OF PSYCHOLOGY (3) Aim is to familiarize the student with the antecedents of modern psychology, the rise of experimental psychology as a science, the British, German, and American schools of psychology, and contemporary pyschological systems. Several lectures cover the philosophical foundations of experimental psychology, and the philosophy of theory construction. *Prerequisite: PY 101, PY 201; (PY 306 strongly recommended).*

PY 316 PSYCHOLOGY OF HUMAN SEXUALITY (3) A study of the differences between the psychological development of men and women. Stresses the phenomenon of role typing at an early age of development. Re-evaluation of Freud's theories on the psychological development of women. Course reviews new research findings on psychosexual development and related child-rearing practices. Not open to freshmen. *Prerequisite: PY 101.*

PY 317 BEHAVIOR MODIFICATION (3) Presentation and intensive discussion of classroom teaching approaches based on respondent and operant conditioning paradigms. Detailed presentation of major principles underlying each approach and application of these principles to classroom learning situations at both elementary and secondary grade levels. Consideration of such topics as token economy and the classroom, modeling, desensitization, effects of punishment of classroom behaviors, approaches to behavioral problems of the emotionally disturbed and/or mentally retarded. *Prerequisite: PY 101, PY 201, PY 303.*

PY 318 PSYCHOLOGY OF INTERPERSONAL RELATIONS AND COMMUNICATIONS (3) Practical experience in interpersonal communication with use of videotape and social psychology laboratory. Review of research on human communication from the viewpoint of transactional analysis, kinesics, the small-group approaches of Rogers, Ellis, Perls, and Synanon. Limited in size and to junior and senior psychology majors; others admitted with special permission of instructor. *Prerequisite: PY 101.*

PY 322 THEORIES OF COUNSELING (3) A presentation of the philosophies, methods, techniques and research associated with five or six major contemporary counseling theories such as psychoanalytic, client-centered, rational emotive, and gestalt. *Prerequisites: PY 101 and PY 201.*

PY 323 COUNSELING THEORY AND PRACTICE (3) Designed to help counselors to develop an understanding of the issues involved in helping relationships dealing with persons having educational, vocational, interpersonal and intrapersonal problems. Techniques and abilities to apply basic counseling skills will be stressed. The aim of the course is to develop an advanced understanding of major counseling theories. Elective for juniors and seniors. *Prerequisite: PY 101, PY 322.*

PY 332 PEER SEX COUNSELING PROGRAM (2 semesters — 1½ credits each) Aims to familiarize students with information basic to human sexual behavior and sexual problems so that these students can function as a resource individuals and counselors to their peers. Training is given in areas such as physiology of sex, problem pregnancies, community resources and counseling techniques. *Prerequisite: Admission through screening interviews and evaluations.*

PY 333 PRACTICUM IN PSYCHOLOGY (6) Students are placed in agencies which provide various psychological services to the community. The primary goal of the placement is to provide an opportunity for the student to become involved in a meaningful manner with the services provided by the agency. It is hoped that the student can make a contribution to the service. The student is responsible, under the joint direction of an agency representative and a Department of Psychology supervisor, for the formulation of a detailed outline of activities, time commitment, and responsibilities. The student will also prepare a term paper and a final evaluation related to the activities in which she or he is involved. The agency is expected to provide general supervision and make a final evaluation of the student's performance. The Department representative will make periodic evaluations of the student's performance and will cooperate fully with the agency supervisor. *Prerequisites: PY 101, PY 322, PY 323.*

PY 335 SENIOR SEMINAR (3) A limited enrollment course designed according to current student and faculty interests and focused on advanced study of current research and theory in a particular area of psychology. *Prerequisite: PY 101 and senior status.*

PY 336 PSYCHOLOGY OF THE FAMILY (3) A presentation of theories of how family interaction and patterns of response influence personality and behavior. An exploration of the characteristics of "healthy" and "unhealthy" families and the types of individuals they produce. A review of family therapy techniques as a means of treating the "identified patient." Limited to juniors and seniors. *Prerequisite: PY 101.*

PY 341 COGNITIVE PSYCHOLOGY (3) The psychology of sensation, perception, psycholinguistics, cognition, and information processing. Topics include computer models of thought and language, artifical intelligence, and altered states of consciousness. Lectures stress in-depth reviews of the experimental evidence which bears on theories of perception and language. *Prerequisite: PY 101.*

PY 343 PRO-SEMINAR I: CLINICAL COMMUNITY COUNSELING (6) Part of a comprehensive program open to students beginning their senior year who are interested in a career in counseling mentally ill children, adolescents and adults; this course combines an overview of the public mental health delivery system, child and adult psychopathology, marital and family psychopathology, diagnostics, psychopharmacology, and clinical assessment, evaluation and diagnostic approaches. Students will observe in a prescribed number of area mental health agencies. The site visitations will approximate a total of 30 hours. *Prerequisite: PY 101, 105, 301, 303, 312, 353, 323, or permission of the instructor.*

PY 344 PRO-SEMINAR II: CLINICAL COMMUNITY COUNSELING (3) Open to those students who have successfully completed Pro-Seminar I in Clinical Community Counseling, this course trains students in the methods and approaches for counseling emotionally ill children, adolescents and adults through extensive use of case methods. Included are strategies for engaging the client, providing supports, developing treatment plans, providing therapy, initiating out-reach and aftercare, performing crisis intervention, and assessing and revising the course of treatment. All students are required to take the internship in Clinical Community Counseling simultaneously with this course. *Prerequisite: PY 343 or permission of instructor.*

PY 345 INTERNSHIP: CLINICAL COMMUNITY COUNSELING (6) This internship involves placement of students in a single mental health agency for ten hours weekly during the semester. Students will work with the staff and clients of the agency and will receive weekly supervision in developing their counseling skills. *Prerequisite: PY 343 and concurrent PY 344.*

PY 350 PSYCHOLOGY OF DEATH AND DYING (3) An inquiry into the current psychological theories, concepts and practices relevant to death, dying and bereavement. The course explores the ways in which individuals and society deal with death and will give students the opportunity to examine their own personal attitudes and philosophy toward death and dying. *Prerequisite: PY 101.*

PY 356 SPECIAL TOPICS IN PSYCHOLOGY (3) An in-depth study of a limited and/or specialized area within one field of psychology. The exact title will vary according to the area of specialization of the instructor and interest of the students. Students may receive no more than 6 sh credit for this course number. *Prerequisite: at least 9 sh (including PY 101) for psychology majors; PY 101 and permission of the instructor for non majors.*

PY 357 ADULT DEVELOPMENT AND AGING (3) A study of human development through the early, middle, and later adult years. The course will focus on the maturational and environmental determinants of changes in sensation and perception, learning and memory, intelligence, cognition, and personality. *Prerequisite: PY 101.*

PY 358 PERSONNEL PSYCHOLOGY (3) The utilization of human resources in organizational settings with primary emphasis on identification and implementation of conditions that lead to effective job performance. Topics include recruitment and selection techniques, job analysis, personnel training, and performance appraisal. *Prerequisite: PY 101.*

PY 359 SENSATION AND PERCEPTION (3) Introduction to the laboratory study of perceptual phenomena. Students use different instrumentation such as the tachistoscope and dichotic listening equipment and apply various methodologies in a series of experiments during the first part of the course, comparing several theoretical approaches. The second part of the course is given to laboratory demonstrations and the development of an individual project. *Prerequisites: PY 101, PY 105, and permission of instructor.*

PY 360 LEARNING LABORATORY (3) Provides students with laboratory experience in animal learning. Initially all students will train animals using basic procedures in behavioral control including shaping, response acquisition and simple discrimination. Students will then pursue individual projects examining response chaining, performance on simple or complex schedules of reinforcement, choice behavior, and other areas of learning. *Prerequisites: PY 101, PY 105, and PY 306.*

PY 361 PSYCHOLOGY OF RACISM (3) Provides students with an understanding of the psychological causes and emotional reality of racism as it affects everyday life. Through the use of lectures, readings, simulation exercises, group research projects, and extensive class discussion, the student explores the psychological impact of racism on both the oppressor and the oppressed. *Prerequisite: PY 101.*

PY 381 EXPERIMENTAL SOCIAL PSYCHOLOGY (3) Provides skills in field and laboratory research methodology. A few topics in social psychology, such as interpersonal attraction, attitude change, social cognition and impression management are discussed in detail. Following an in-depth analysis of a specific topic, students conduct either field or laboratory experiments. Students are closely supervised and are responsible for conducting and scheduling experiments; collecting, coding and analyzing data; and submitting a final written report in APA format for each experiment. *Prerequisites PY 105, PY 304, or permission of instructor.*

PY 399 INDEPENDENT STUDY — PSYCHOLOGY (1-6) Credit for independent study is ranted for *special academic work done under the supervision of a faculty member of the Psychology Department.* This work may involve a) library research and subsequent preparation of a scholarly paper, b) design and completion of an experimental project or field study, c) advanced study and application of concepts in a particular area of psychology beyond that covered in typical course work. At the end of the project, a final written report should be submitted to the faculty supervisor, with a copy to the departmental advisor and a copy to the chairman of the department. *Prerequisite: PY 101; approval by student's advisor, department chairman and Academic Dean.*

SOCIOLOGY AND SOCIAL SCIENCE

Chair, Jesse James

Kate Bagley, Mostafa M. Noury

The student majoring in Social Science takes courses from several social science areas: Economics, Geography, History, Political Science, Psychology, and Sociology. Majors may select either of the following two concentrations: the general Social Science concentration or the Social Work concentration. At present, the department does not offer a Sociology or Social Work major.

The department offers two minors: one in sociology and one in social work. The department also provides for practical experience through placement in community agencies.

As a liberal arts degree candidate, the Social Science student receives a broad education providing for vocational flexibility in the worlds of both business and government. Private and public agencies offer employment possibilities in research and social service work. The student seeking a progressive, life-long career path either as a social scientist or as a social service worker should, however, seriously consider professional study beyond the bachelor's level.

REQUIREMENTS FOR SOCIAL SCIENCE MAJORS

FOUNDATION COURSES

One foundation course (i.e., a level-100 course, usually) should be taken in each of the following fields: Sociology, Psychology, Geography, Economics, and Political Science.

CONCENTRATIONS

Nine credits of post-introductory work (level-200 course or higher) should be selected in one of the following fields and six in each of two others: History, Sociology, Psychology, Geography, Economics, and Political Science. Six additional credits are required in one of the three fields selected above for a total of twenty-seven credits in the concentrations. A student might, for example, select five courses in Economics, and two in Sociology.

An alternative to the above is the Social Work concentration which requires 12 hours in Social Work, (Introduction to Social Welfare, Introduction to Social Work, Interventive Methods in Social Work, and Human Services: Planning and Organization). In addition, 12 hours of post-introductory work in Sociology are recommended. Furthmrore, Principles of Sociology and one or two introductory courses in the following areas are required: Economics, Geography, Psychology, Political Science (beyond American National Government), History (beyond U.S.)

MINOR REQUIREMENTS IN SOCIOLOGY; SOCIAL WORK; AND SOCIAL SCIENCE

Thedepartment offers three minors, grants teaching certification in social studies, and provides a variety of service courses to augment other academic disciplines throughout the college. The department also provides for practical experience through placement in community agencies.

TEACHING CERTIFICATION IN SOCIAL STUDIES

The department offers courses toward certification in Social Studies upon the completion of specified Social Science and Education courses.

COURSES

SO 101 PRINCIPLES OF SOCIOLOGY (3) An overall study of the concepts and principles of group behavior — analysis of the components of culture and the structure of society; social organization and differentiation.

SO 102 CULTURAL ANTHROPOLOGY (3) An introduction to cultural anthropology as a discipline and to the concepts and techniques essential for understanding, different cultures, both contemporary and past — analysis of universal aspects of human experience, including the family, economic, political, religious, aristic, and linguistic systems, examined in cross-cultural perspective — brief examination of hunters and gatherers, tribal and peasant peoples, among others — introduction to the dynamics of cultural contact, cultural evolution, and change.

SO 104 INTRODUCTION TO SOCIAL WORK (3) Pre-professional course designed to provide view of historical background, basic principles and concepts, current trends, and careers in Social Work.

SO 105 INTRODUCTION TO SOCIAL WELFARE (3) A study of Social Welfare as an institution — the development of the Social Welfare profession through the ages, comparative institutional analysis, normative and organizational structure.

SO 200 CULTURAL ANTHROPOLOGY (3) An overview of cultural anthropology as a discipline and to the concepts and techniques essential for understanding different cultures, both contemporary and past. Includes analysis of universal aspects of human experience, including the family, economic, political, religious, artistic, and linguistic systems, examined in cross-cultural perspective. A brief examination of hunters and gatherers, tribal and peasant peoples, among others and an introduction to the dynamics of cultural contact, cultural evolution, and change.

SO 201 THE FAMILY (3) The family as a social institution, affected by and affecting other institutions. Some material of the family in non-industrial societies will be included, but the main focus will be on persisting patterns and on changes in pre-marital, marital, and family relationships in the United States.

SO 202 RACE AND ETHNIC RELATIONS (3) A study of the phenomena which arise when different biological and cultural groups interact, and of theories and methods calculated to reduce antipathy and discrimination against minority groups, with an emphasis on American relations.

SO 204 INTRODUCTION TO RESEARCH METHODS IN SOCIOLOGY (3) The development of social research; the nature of sociological inquiry; basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. *Prerequisite: SO 101.*

SO 300 SENIOR THESIS/INTERNSHIP (3-6) The course provides an opportunity for independent study which may take a theoretical direction (the non-agency research or the thesis option) or may involve observer participation in relevant community agencies and organizations.

SO 302 SOCIAL WELFARE AND SOCIAL CHANGE (3) The development of welfare and planning in association with the industrialization process. Agencies and occupations dealing especially with the elderly and youthful poor. Modern policies and proposals for change in selected problem areas. *Prerequisite: SO 101.*

SO 303 SOCIOLOGY OF LEISURE AND RECREATION (3) The study of the social institutional structure and functional systems of society related to leisure behavior. The social significance of leisure and the human values in leisure-time pursuits. Examination of practices and uses of leisure in the United States. *Prerequisite: SO 101.*

SO 305 URBAN SOCIOLOGY (3) Growth, structure and functions of the city. The urban place as an ecological, stratified, attitudinal, and decision-making unit. Urban problems and urban social relations. *Prerequisite: SO 101.*

SO 307 SOCIAL PROBLEMS (3) A study of contemporary American society in light of selected problem areas. An analysis of contributing factors, conflicting views and values, current situation of prospects for resolution involving application of sociological concepts, theories, and methods. *Prerequisite SO 101.*

SO 308 SOCIAL STRATIFICATION (3) A systematic treatment of the ranking systems in various social structures in America. Theories of social stratification and mobility, analysis of social class studies in the United States, the interplay of power, status, and control. *Prerequisite: SO 101.*

SO 310 JUVENILE DELINQUENCY AND CRIMINOLOGY (3) Meaning, identification, and causes of delinquent and criminal behavior. The role of social institutions in corrections, control, and prevention of youthful and adult offenses. *Prerequisite: SO 101.*

SO 311 COMPLEX ORGANIZATIONS (3) Examination of major theories and studies of complex organizations. Emphasis is on recent findings regarding the influence of organizations on the behavior of members, bureaucratic "pathology," succession and displacement of goals, organizational types, characteristics, and problems of bureaucracies in a variety of settings — occupational, military, medical, religious, correctional, political; organization change in the light of contemporary theory and research noting the functioning of complex organizations in preindustrial and industrial societies. *Prerequisite: SO 101.*

SO 312 POPULATION STUDIES IN SOCIOLOGY (3) Introduction to population studies, provided within a sociological framework, and an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. *Prerequisite: SO 101.*

SO 314 COLLECTIVE BEHAVIOR (3) Study of such phenomena as crowds and mobs, panics and riots, fads and fashions, rumor and propaganda, the formation of publics, and public opinions. Examines the transition from unorganized to organized group behavior, from behavior based largely on emotional contagion to behavior on a shared symbolic framework. *Prerequisite: SO 101.*

SO 315 CHANGING SEX ROLES IN AMERICA (3) A study of existing sex roles in contemporary American society; examination of the determinants of such sex roles; comparison with existing sex roles in other societies; investigation of the relationship between biological priorities and sex role expectations; analysis of how sexual ascription at birth influences life experiences and chances of men and women; analysis of the relationship between sex role and social stratification; and an analysis of the causes and consequences of change in culturally patterned sex roles. *Prerequisite: SO 101.*

SO 316 SMALL GROUPS (3) A systemtatic study of the influential theoretical and empirical writings and studies, classical and current, dealing with the structure and functioning of small groups; the influence of small groups research on theoretical perspectives in macro-sociology. *Prerequisite: SO 101.*

SO 318 SOCIOLOGY OF MEDICAL CARE (3) Examination of existing theory and research on medical care of a social institution. Study of the relation of social factors to illness, both physical and mental, and its distribution. Attitudes and beliefs regarding illness and the response to illness in various societies. Sociological analysis of hospitals as social organizations, of the medical profession, and of medical education. Comparison of medicine as it is practiced in the United States and in other countries. *Prerequisite: SO 101.*

SO 320 SOCIOLOGY OF EDUCATION (3) American schools as social organizations, as community associations, and as socialization agents. The functions of the school, and the relation of the institution of education to culture and social structure. Problems of change. *Prerequisite SO 101.*

SO 321 SOCIAL GERONTOLOGY (3) Aging as a biological, psychological, and sociological process with numerous economic and political implications. Emphasis will be placed on the role of both the family and the community. The crisis of retirement, illness, and dying will also be treated. *Prerequisite: SO 101.*

SO 322 INTERVENTIVE METHODS IN SOCIAL WORK (3) A study of the relationship of social change and social problems; the role of the individual, group, community in social change and in offering social services to individuals and groups; and the professional skills and techniques necessary to the offering of these social services. *Prerequisite: SO 104 and SO 105.*

SO 323 INDUSTRIAL SOCIOLOGY (3) A macro and micro-sociological examination of structure and functioning of industrial societies and their institutional and organizational components; major theoretical approaches assessing industrial systems. Production and distribution values, institutions; organizations, and roles of industrial societies along with norms affecting industrial social experience will be emphasized. *Prerequisite: SO 101.*

SO 324 HUMAN SERVICES: PLANNING AND ORGANIZATION (3) An analytical examination of the essential components and planning of human service: targets and agents. Assessment of innovations and their economic, social, and psychological costs and benefits. *Prerequisites: SO 104 and SO 105.*

SO 351 SOCIAL WORK PRACTICUM (6) The course involves participant observation in social welfare agencies. *Prerequisite: SO 322.*

SO 399 INDEPENDENT STUDY (1-6)

SPANISH (SEE FOREIGN LANGUAGES AND LITERATURES)

WESTFIELD STATE COLLEGE BOARD OF TRUSTEES

Philip A. Beattie, J.D.
Jane F. Berry (Chairman)
Sophie Chmura, L.L.D.
Kelly A. Clark
Richard T. Courtney
Charles P. Hapcook, D.D.S.
Kathleen B. Jarret
Robert E. Jennings
Thomas S. Madru
John St. Clair, J.D.
Michael P. Ziter, J.D.

The date in parentheses following the name indicates the beginning of service at Westfield State College.

ADMINISTRATION

JOHN F. NEVINS (1969) Chief Executive Officer
B.A., M.A., Niagara University; M.A., Ph.D., Catholic University

SARAH L. LIGHT (1985) Vice President, Student Services
B.A., Athens College; M.A., University of North Alabama; Ed.D., Ph.D. University of Alabama

PAUL J. MEI (1970) Vice President, Finance, and Treasurer
B.B.A., Western New England College

RICHARD E. GREENE (1981) Acting Vice President, Academic Affairs
B.S., Worcester State College; M.A., Clark University; Ed.D., Boston University

GARRETH J. LYNCH (1979) Vice President, Administration
B.A., Westfield State College; M.P.A., Suffolk University

ROBERT A. MARTIN (1980) Dean, Undergraduate Studies
B.A., Wesleyan University; M.A., Ph.D., University of Rochester

TIMOTHY C. MURPHY (1972) Director, Human Resources and Labor Relations
B.A., Amherst College

MAUREEN HOGAN (1983) Staff Associate, President's Office
B.A., College of Our Lady of the Elms; M.Ed., Springfield College; M.S.W., University of Connecticut

ADRENE ADAMS (1970) Staff Associate, Campus Center
B.A., University of Massachusetts; M.Ed., Westfield State College

KAMAL H. ALI (1981) Director, Minority Affairs
M.Ed., Ed.D., University of Massachusetts

F. PAUL BOGAN (1963) Director, Athletics
B.S., University of Massachusetts; M.Ed., Pennsylvania State University

CATHERINE BROWNLIE (1986) Staff Assistant, Financial Aid
B.A., Our Lady of the Elm College

DIANA A. CALLAHAN (1985) Staff Assistant, Nurse

RICHARD A. CHASSEY (1986) Staff Assistant, Residence Director
B.A., Hampden-Sydney College; M.Ed., University of Virginia

TRACEY S. CHAVIS (1984) Associate Director, Financial Aid
B.A., M.A., University of Connecticut

DEBORAH A. CLIFFORD (1983) Assistant Director, Residential Life
B.S., M.E.D., Springfield College

RAYMOND F. COSTELLA (1968) Staff Associate, Buildings and Grounds

WILLIAM E. CREAN (1963) Director, Admissions
B.S.Ed., Westfield State College; M.Ed., American International College

ROBERT S. CULKEEN (1983) Staff Associate, Media Services
B.S., Fitchburg State College

GEORGE W. CUSHMAN (1978) Staff Assistant, Bursar

SUZANNE DeANGELO (1986) Staff Assistant, Residence Director
B.A., Western New England College; M.Ed., Springfield College

LINDA A. DUVAL (1985) Staff Assistant, Nurse

MAUREEN F. FITZGERALD (1985) Staff Assistant, Alumni Affairs
B.A., Westfield State College; M.B.A., American International College

DONALD A. FORD (1971) Director, Affirmative Action
B.A., Shaw University; M.Ed., American International College; C.A.G.S., American International College.

JOAN E. FULLER (1986) Staff Assistant, Minority Affairs
B.A., Westfield State College; M.Ed., Springfield College

MIECZYSLAW GODEK (1969) Director, Facilities Planning
B.S.E., Fitchburg State College; M.S.E., Rennsselaer Polytechnic Institute

KENNETH R. HAAR (1982) Staff Associate, Computer Programmer
B.A., Southampton College; M.S., State University of New York at Albany

CHARLES D. HAGAN (1956) Director, Student Records and Registrar
B.S., Arnold College; M.A., American International College

RAY A. HANDY (1985) Staff Assistant, Residence Director
B.S., M.S., Springfield College

JAMES E. HARDY (1985) Staff Assistant, Administrative Services
B.A., Antioch College

RUDOLPH E. HEBERT (1982) Staff Associate, Computer Programmer
B.S., Westfield State College

DARYL W. HENDERY (1980) Director, Campus Center
B.A., M.S., State University of New York at Albany

NORMAN E. HIERSCHE (1967) Associate Dean, Student Service
B.S., M.P.E., Springfield College

MURIEL E.F. JANNERY (1983) Staff Assistant, Graduate Studies and Continuing Education
Associate, Becker Junior College

ANDREW D. JOHNSON (1979) Staff Associate, Campus Center
B.A., Westfield State College

JEANNE M. JULIAN (1982) Staff Associate, Institutional Advancement
B.A., Allegheny College; M.F.A., University of Massachusetts

PHILIP A. KENNEDY (1980) Director, Fiscal Affairs and Assistant Treasurer
A.A., Grahm Junior College

BRUCE W. KING (1986) Staff Assistant, Minority Affairs
B.A., University of Massachusetts; M.A.T., Simmons College

WILLIAM R. KIRK (1970) Associate Dean, Career Planning
B.S., M.Ed., Springfield College; C.A.G.S., Springfield College

MAXINE E. LENTZ (1982) Acting Director, Graduate Studies and Continuing Education
B.S., Bowling Green State University; M.A., Ohio State University; Ph.D., Kansas State University

LORI LETENDRE (1979) Staff Assistant, Admissions
B.A., M.A. Westfield State College

JAMES F. LOMBARD (1982) Director, Media Services
B.A., Westfield State College; M.Ed., Boston College

MAUREEN T. LUCEY (1983) Staff Assistant, Conference Services
B.A., Albertus Magnus College; M.E.D., Westfield State College

KENNETH MAGARIAN (1977) Staff Associate, Athletics
A.A., Northern Essex Community College; B.S.Ed., Westfield State College; M.S., Springfield College

ROBERT C. MAILLOUX (1972) Staff Associate, Media Services
B.S.E., M.E.D., Westfield State College

JOHN F. MARCUS (1986) Director, Financial Aid
B.S., North Adams State College

PAUL A. MARROTTE (1974) Director, Institutional Research
B.A., University of New Hampshire; M.A., Ph.D., University of North Carolina

PETER D. MAZZA (1971) Dean, Student Services
B.A., American International College; M.Ed., Springfield College; J.D., Western New England College, School of Law

PATRICIA McCABE (1986) Staff Assistant, Program Coordinator
B.A., University of Vermont; M.Ed., Indiana University

KATHERYN L. McCOLLEY (1981) Staff Associate, Residence Director
B.A., M.S., State University of New York at Albany

JAMES W. McKENNA (1968) Associate Dean, Placement
B.A., Boston College; M.Ed., Springfield College

DOROTHY MILLER (1977) Staff Assistant, Nurse
Diploma, Mercy Hospital School of Nursing

JOHN C. MORYTKO (1982) Staff Associate, Media Services
B.S., American International College; M.Ed., Westfield State College

BARRY M. MURPHY (1966) Director, Management Information Systems
A.S., Springfield Technical Community College; B.A., Westfield State College

CARLTON PICKRON (1986) Staff Assistant, Minority Affairs
B.S., M.Ed., Springfield College

RICHARD N. PIERCE (1977) Staff Assistant, Athletic Trainer
B.S., American University

PATRICIA A. RIX (1962) Staff Associate, Nurse
Diploma, Mercy Hospital School of Nursing

CURT D. ROBIE (1970) Director, Residential Life
B.A., Westfield State College

NANCI SALVIDIO (1986) Staff Assistant, Minority Affairs
B.A., M.A., Westfield State College

JOSEPH E. SHINN (1986) Staff Assistant, Minority Affairs
B.A., M.A., University of Miami

HENRY A. STARKEL (1982) Director, Public Safety
A.S., Tunxis Community College; B.S., University of New Haven; M.S., Westfield State College

TRAVIS TATUM (1986) Staff Assistant, Minority Affairs
B.A., University of Michigan; M.A., University of California

LINDA M. WELSH (1986) Staff Assistant, Residence Director
B.A., North Adams State College; M.A., Kutztown University

A. MORGAN WHEELOCK (1976) Assistant Director, Management Information Systems
B.A., Westfield State College

D. BRUCE WHITTEMORE (1979) Staff Assistant, Power Plant Engineer

PEGGY L. WOLPERT (1982) Staff Associate, Graduate Studies and Continuing Education
B.A., Westfield State College

FACULTY

EDWIN J. ABAR (1971) Associate Professor, Mass Communication
B.A., M.Ed., Westfield State College; Ph.D., University of Massachusetts

MICHAEL S. ANCIELLO (1982) Professor, History
A.M., Certificate Russian and East European Studies, Boston College; Ph.D., Saint Louis University

BRADFORD ART (1986) Assistant Professor, Philosophy
B.A., Miami University; Ph.D., Brown University

VICTOR H. ASCOLILLO (1974) Associate Professor, Criminal Justice
B.A., University of Massachusetts; M.A., Ph.D., University of South Carolina; J.D., Western New England College

BRETT AVERITT (1986) Assistant Professor, English
B.A., Ph.D., University of Texas

KATE BAGLEY (1980) Assistant Professor, Sociology and Social Science
B.A., Bernard College; M.S.W., Fordham University; Ph.D., University of California at Berkeley

PETER P. BALL (1967) Associate Professor, Physical Science
B.A., M.A., American International College; M.S., Simmons College; Ph.D., University of Massachusetts

MAUREEN A. BARDWELL (1984) Assistant Professor, Mathematics
B.S., American International College; M.A., Ph.D., Bowling Green State University

AMICO J. BARONE (1966) Associate Professor, English
B.S., Mount St. Mary's College; M.Ed., Westfield State College

DONALD J. BASTARACHE (1967) Professor, Music
B.Mus.Ed., Boston University; M.Mus., Boston Conservatory of Music; Ed.D., University of Massachusetts

RUSSELL P. BELLICO (1970) Professor, Economics/Business Administration
B.A., M.A., University of Connecticut; Ed.D., University of Massachusetts

CLARENCE W. BENNETT (1984) Professor, Mathematics
B.A., American International College; M.S., University of Massachusetts; M.A., Bowdoin College; Ed.D., Boston University

WILLIAM D. BENNETT (1979) Associate Professor, Geography and Regional Planning
B.A., Ohio Wesleyan University; M.A., Bowling Green State University; Ph.D., Michigan State University

TIMOTHY J. BERGENDAHL (1980) Professor, Computer and Information Science
B.S., North Adams State College; Ph.D., University of Vermont

GILBERT W. BILLINGS (1966) Professor, Physical Science
B.S.E., Castleton State College; M.B.S., University of Colorado; Ph.D., University of Connecticut

ANTHONY J. BONACQUISTI (1969) Assistant Professor, Geography and Regional Planning
B.S.E., North Adams State College; M.S., Pennsylvania State University

KENNETH W. BOWSER (1970) Associate Professor, Criminal Justice
B.A., Hunter College; M.A., Fordham University

ROBERT L. BRADY (1967) Professor, History
B.A., Loras College; M.A., Ph.D., State University of Iowa

VLADIMIR BRODSKY (1978) Associate Professor, Art
M.A., Ph.D., Moscow University, Russia

ROBERT T. BROWN (1967) Professor, History
B.S.E., State University of New York at Geneseo; Ph.D., Syracuse University

WAYNE R. BROWN (1982) Instructor, Computer and Information Science
B.S., Pratt Institute; M.S., Western New England College

GERARD A. CAHILL (1986) Assistant Professor, Economics/Business Administration
B.S.E.E., Manhattan College; Ph.D., New York University

GEORGE C. CAMARA (1964) Professor, English
B.S., Southern Connecticut State College; M.A., Northeastern University; Ph.D., University of Massachusetts

JAMES R. CARABETTA (1984) Assistant Professor, Computer and Information Science
B.S., M.Ed., Springfield College; C.A.G.S., Springfield College

R. BRUCE CARROLL (1986) Professor, Criminal Justice
B.A., University of Vermont; M.P.A., Wayne State University; Ph.D., University of Chicago

GUS CHRISANTHOPOULOS (1966) Assistant Professor, Biology
B.A., American International College; M.Ed., Westfield State College

ALVIN I. COHEN (1965) Professor, Psychology
B.A., Northeastern University; M.A., Ph.D., Southern Illinois University

PORTER D.H. COLE (1957) Professor, English
A.B., Harvard University; D. Phil., Oxford University

PATRICIA C. CONANT (1969) Professor, Art
B.F.A., Massachusetts College of Art: M.F.A., Tufts University

JOSEPH K. CONNOLLY (1965) Assistant Professor, Psychology
B.A., M.A., American International College; Ph.D., Fordham University

WANDA D. COOK (1974) Associate Professor, Education
B.S., State University of New York at Geneseo; M.S., Ed.D., Florida State University

JOAN H. CORELL (1968) Professor, Psychology
B.S., Wagner College; M.S., Ph.D., Indiana University

ROBERT W. CORMIER (1982) Assistant Professor, Computer and Information Science
B.A., University of Massachusetts; M.B.A., American International College

FLOYD W. CORSON (1963) Associate Professor, Music
A.B., M.Mus Ed., Boston University

JUSTIN R. CURRY (1968) Associate Professor, Art
B.F.A., Tufts University; M.F.A., Tulane University

GEORGE A. CURTIN (1966) Associate Professor, English
B.A., College of Our Lady of The Elms; M.A., Rivier College

JOHN J. DARROW (1971) Professor, Economics/Business Administration
B.A., M.A., American International College; M.A., Ph.D., University of Connecticut

THEODORE C. DAVIDOVICH (1979) Professor, Music
B.A., California State; M.M., New England Conservatory of Music; D.M.A., Stanford University

SUZANNE E. DAVIS (1969) Professor, Psychology
B.A., Central Connecticut State College; M.S., Ph.D., University of Massachusetts

ABE DELSON (1958) Professor, English
B.A., City College of New York; M.A., Ph.D., New York University

PETER J. DEMOS (1970) Professor, Music
B. Mus., Michigan State University; M. Mus., Western Michigan University; A.Mus.D., University of Michigan

DAVID A. DOE (1979) Associate Professor, Biology
B.S., Bates College; M.S., Northeastern University; Ph.D., University of North Carolina

RALPH R. DONALD (1983) Instructor, Mass Communication
B.A., M.A., California State University

WILLIAM J. DONOVAN (1983) Assistant Professor, Economics/Business Administration
B.A., Lafayette College; M.S.B.A., University of Massachusetts

CATHERINE A. DOWER (1956) Professor, Music
A.B., Hamline University; M.A., Smith College; Ph.D., Catholic University

ARTHUR E. DRISCOLL (1967) Associate Professor, Biology
B.S., University of Massachusetts; M.S., Northeastern University; Ph.D., University of Massachusetts

SUSAN E. DUTCH (1981) Associate Professor, Psychology
B.A., M.A., Ph.D., University of Connecticut

WILLIAM F. DUVAL (1970) Associate Professor, Psychology
B.S., Holy Cross; M.A., University of Connecticut; Ed.D., Indiana University

WESTON A. DYER (1970) Associate Professor, Political Science
B.S.E., University of Maine; M.S.E., Gorham State College; Ed.D., Ball State University

JOEL C. EBERLIN (1968) Assistant Professor, Biology
A.B., Mount Holyoke College; M.S., Yale University

RONALD R. EDWARDS (1971) Professor, Mathematics
A.B., Brown University; M.A.T., Wesleyan University; Ph.D., University of Connecticut

MICHAEL ENGEL (1976) Associate Professor, Political Science
B.A., City College of New York; M.A., University of Wisconsin; Ph.D., City University of New York

NOEMI ESCANDELL (1983) Professor, Foreign Languages and Literatures
B.A., Queens College; M.A., Ph.D., Harvard University

PHILIP ETTMAN (1982) Associate Professor, Economics/Business Administration
B.A., State University New York at Buffalo; J.D., Boston University School of Law; M.B.A., University of Connecticut

TILIA J. FANTASIA (1966) Professor, Health, Physical Education, Recreation and Dance
B.S.E., M.Ed., Tufts University; Ed.D., Boston University

JEFFREY I. FLATT (1981) Assistant Professor, Psychology
B.A., Hunter College; M.A., Ph.D., Adelphi University

BERNARD J. FLEURY (1968) Professor, Education
B.A., M.S., Ed.D., University of Massachusetts

LAWRENCE C. FOARD (1966) Professor, Philosophy
B.A., Ursinus College; M.Div., Yale University; M.A., University of Pennsylvania; Ph.D., Temple University

RICHARD E. FRANK (1983) Assistant Professor, Education
B.A., North Adams State College; Ed.D., University of Massachusetts

LARRY D. FRENCH (1970) Assistant Professor, Health, Physical Education, Recreation, and Dance
B.S., Springfield College; M.Ed., Bridgewater State College; M.S., C.A.G.S., Springfield College

MARCI GINTIS (1984) Assistant Professor, Art
B.F.A., M.F.A., Tufts University

GILBERT B. GONSALVES (1983) Assistant Professor, Computer and Information Science
B.A., Clark University; B.A., Boston College; M.S., Western New England College

ROBERT A. GOODALE (1982) Professor, Psychology
B.A., University of Maine; M.S., Ph.D., Tufts University

BRUCE J. GORDON (1974) Associate Professor, Education
B.A., M.S., Long Island University; Ed.D., Syracuse University

GERARD J. GRAVEL (1969) Assistant Professor, Health, Physical Education, Recreation, and Dance
B.S., University of Massachusetts; M.Ed., Kent State University

NORMAN GREENBERG (1981) Associate Professor, Criminal Justice
B.A., Stanford University; M.Crim., University of California; Ph.D., University of New Hampshire

WALTER L. GRIFFITH (1981) Associate Professor, Computer and Information Science
B.S., M.S., Mass. Institute of Technology; Ph.D., Harvard University

ROBERT O. GUILBAULT (1971) Professor, Education
B.A., University of Massachusetts; M.Ed., Boston University; M.A., San Francisco State; Ph.D., University of Connecticut

MICHAEL L. GURAL (1982) Associate Professor, Economics/Business Administration
B.A., MA., Rutgers University

LOUISE B. HAAS (1969) Associate Professor, Education
B.A., University of Connecticut; M.A., Central Connecticut State College; Ed.D., Nova University

DIANNE HABER (1981) Assistant Professor, Mathematics
B.A., Wheaton College; M.A., Hunter College

JOSEPH J. HANRAHAN (1982) Assistant Professor, Criminal Justice
B.A., M.A., City University of New York; Ph.D., Fordham University

FREDERICK F. HARLING (1966) Professor, History
A.B., Tufts University; S.T.B., Ph.D., Boston University

BETTY D. HARRIS (1970) Associate Professor, Biology
B.A., M.S., Ph.D., Wayne University

GERALD HEALY (1981) Assistant Professor, Economics/Business Administration
A.A., Holyoke Community College; B.A. American International College; M.B.A. American International College; C.L.U., The American College

MARTIN R. HENLEY (1977) Associate Professor, Education
B.A., State University of New York at Oswego; M.S., Ph.D., Syracuse University

WARREN H. HILL, JR. (1970) Professor, Mathematics
B.Ed., Keene State College; M.S.T., University of New Hampshire; Ph.D., Peabody College

BARBRA A. HOLLAND (1970) Assistant Professor, Education
B.S., Eastern Michigan University; M.S., Michigan University

LESTER T. HUTTON (1970) Associate Professor, History
B.A., Chicago University; M.A., Eastern Illinois University; Ph.D., University of Illinois

JOHN W. IFKOVIC (1978) Associate Professor, History
B.A., Fordham University; M.A.T., Yale University; Ph.D., University of Virginia

ALPHONSE J. JACKOWSKI (1964) Professor, Mathematics
B.S., M.S., Uniersity of Massachusetts

JAMES J. JACKOWSKI (1982) Instructor, Computer and Information Science
B.S., University of Massachusetts; M.Ed., Westfield State College

JESSE W. JAMES (1977) Assistant Professor, Sociology and Social Science
A.B., Lincoln University; M.A., Ph.D., University of Massachusetts

ARTHUR A. JANNERY (1979) Associate Professor, Music
B.M., M.M., Boston University

JOHN J. JONES (1977) Assistant Professor, Criminal Justice
B.S., University of Maine; M.S., Youngstown State University

LESLIE KANE (1979) Associate Professor, English
B.A., Brooklyn College; M.A., Fairleigh Dickinson University; Ph.D., New York University

MAUREEN KANE (1982) Instructor, Economics/Business Admininstration
B.A., College of Our Lady of The Elms; M.B.A., American International College

RICKI E. KANTROWITZ (1983) Associate Professor, Psychology
B.A., Simmons College; M.A., Ph.D., Michigan State University

MARTIN KAUFMAN (1969) Professor, History
B.A., Boston University; M.A., University of Pittsburgh; Ph.D., Tulane University

BARBARA KEIM (1985) Assistant Professor, Art
B.S., Ithaca College; M.A.T., Rhode Island School of Design

STEPHANIE B. KELLY (1986) Assistant Professor, Geography and Regional Planning
B.S., Bridgewater State College; M.E.P., Arizona State University

ANDREW S. KIM (1965) Associate Professor, Mathematics
B.S., Seoul National University; M.S., University of Massachusetts

MICHAEL F. KONIG (1985) Assistant Professor, History
B.A., United States International College; M.A., University of San Diego; Ph.D., Arizona State University

WALTER A. KORZEC (1973) Associate Professor, Art
B.A., University of Massachusetts; M.Ed., Westfield State College

NANCY KOTZEN (1981) Assistant Professor, Economics/Business Administration
B.S., B.A., University of Bridgeport; M.A., Suffolk University; M.B.A., Western New England College

DANIEL J. KOURY (1982) Associate Professor, Music
B.M., Ph.D., Boston University

JOHN KURTY (1966) Assistant Professor, Health, Physical Education, Recreation and Dance
B.S., Pennsylvania State University; M.S., Springfield College

DAVID A. LAING (1977) Assistant Professor, Health, Physical Education, Recreation and Dance
B.S., M.S., C.A.G.S., Springfield College

DONALD L. LANDRY (1965) Professor, Education
B.S., M.Ed., Westfield State College; Ph.D., University of Connecticut

LAWRENCE W. LATOUR (1966) Associate Professor, Education
B.S., M.Ed., Westfield State College; C.A.G.S., University of Connecticut

ROBERT L. LEHAN (1968) Associate Professor, English
B.F.A., M.F.A., Boston University

KARL K. LEIKER (1976) Professor, Geography and Regional Planning
B.A., Fort Hays Kansas State College; M.A., University of Missouri; Ph.D., Pennsylvania State University

CATHERINE E. LILLY (1975) Professor, Mathematics
B.A., M.A., Ph.D., University of Michigan

CELESTE M. LOUGHMAN (1972) Professor, English
B.S., American International College; M.A.T., Smith College; Ph.D., University of Massachusetts

JOHN A. LOUGHNEY (1979) Associate Professor, Philosophy
B.S., St. Joseph's University; Ph.D., Purdue University

DAVID A. LOVEJOY (1970) Professor, Biology
B.A., Ph.D., University of Connecticut

ALEX S. MACKERTICH (1971) Associate Professor, Education
B.A., Calcutta University; M.A., Fairfield University; Ph.D., University of Wisconsin

SANAT K. MAJUMDER (1972) Professor, Biology
B.S., M.S., Calcutta University; Ph.D., University of New Hampshire

LLOYD K. MANZER (1970) Associate Professor, Music
B.M., Boston University

HORACE MARCHANT (1978) Associate Professor, Psychology
B.A., Lawrence University; M.S., Ph.D., University of Massachusetts

L. MICHAEL McCARTNEY (1976) Assistant Professor, Criminal Justice
B.A., Fordham University; M.A., American International College

THOMAS McFARLIN (1978) Assistant Professor, Economics/Business Administration
B.S., University of Pennsylvania; M.B.A., Western New England College

DEWEY McGOWEN (1973) Assistant Professor, Education
B.S., Springfield College; M.Ed., Boston University; Ed.D., University of Massachusetts

ROBERT A. McGUIGAN (1974) Professor, Mathematics
B.A., Carleton College; Ph.D., University of Maryland

KATHLEEN M. McINTOSH (1980) Associate Professor, Foreign Languages and Literatures
B.A., Mount Holyoke College; Ph.D., University of Massachusetts

BERNARD G. McMAHON (1965) Associate Professor, Art
B.S.E., Massachusetts College of Art; M.A.T., Assumption College

VALERIE MELBURG (1982) Assistant Professor, Psychology
B.A., City University of New York; Ph.D., State University of New York at Albany

FRANK E. MELLO (1965) Professor, English
B.F.A., M.F.A., Boston University

ALIDA V. MERLO (1975) Professor, Criminal Justice
A.B., Youngstown State University; M.S., Northeastern University; Ph.D., Fordham University

GARY E. MERLO (1983) Instructor, Economics/Business Administration
B.B.A., University of Massachusetts; M.B.A., Western New England College

RONALD N. MICHAUD (1978) Associate Professor, Art
B.F.A., M.F.A., University of Massachusetts

THOMAS L. MILLETTE (1986) Assistant Professor, Geography and Regional Planning
B.A., University of Massachusetts; M.Sc., McGill University; M.A., Ph.D., (ABD), Clark University

LINDA W. NOBER (1976) Professor, Education
B.A., M.S., Adelphi University; Ed.D., University of Massachusetts

MOSTAFA M. NOURY (1973) Associate Professor, Sociology and Social Science
B.S., Alexandria University (Egypt); M.S., Ph.D., Iowa State College

RAYMOND T. OURAND (1967) Associate Professor, Foreign Languages and Literatures
B.S., Georgetown University; M.A., American University

JOSEPH L. PAPPALARDO (1969) Professor, Education
B.S., Merrimack College; M.Ed., Boston State College; C.A.G.S., Ed.D., Boston University

ANNE D. PASQUINO (1967) Professor, Computer and Information Science
B.A., Emmanuel College; M.A.T., Brown University; Ed.D., University of Massachusetts

JOHN D. PAULMANN (1986) Assistant Professor, Mass Communication
B.A., Fordham University; M.A., Columbia University; Ph.D., Fordham University

KATHLEEN B. PELLEGRINO (1978) Associate Professor, Economics/Business Administration
B.S., Boston University; M.B.A., Western New England College

JOSEPH F. PEREZ (1963) Professor, Psychology
B.A., University of Connecticut; M.Ed., Boston University; Ph.D., University of Connecticut

JAMES W. PHILLIPS (1967) Professor, Biology
B.A., Dickinson College; M.S., University of Pennsylvania; Ph.D., University of Massachusetts

ERIKA E. PILVER (1975) Professor, Political Science
B.A., M.A., Ph.D., University of Connecticut

EDWARD C. POWERS (1968) Professor, English
A.B., Holy Cross College; M.A., Boston College; Ph.D., Tufts University

GEORGE PSYCHAS (1967) Professor, Geography and Regional Planning
B.A., M.A., Eastern Michigan University; Ed.D., University of Massachusetts

ANDREW R. RAPOSA (1965) Professor, Political Science
B.S., Boston University; M.A.T., Brown University; Ph.D., University of Massachusetts

AMELIA H. RIOU (1965) Associate Professor, Health, Physical Education, Recreation and Dance
B.S., Cortland State Teacher's College; M.Ed., Boston University

BROOKS ROBARDS (1979) Associate Professor, Mass Communication
A.B., Bryn Mawr; M.A., University of Hartford; Ph.D., University of Massachusetts

BETTE B. ROBERTS (1976) Professor, English
B.A., Miami University, Ohio; M.A., Northwestern University; Ph.D., University of Massachusetts

PATRICK V. ROMANO (1971) Professor, Physical Science
B.A., American International College; Ph.D., Worcester Polytechnic Institute

PETER C. ROSNICK (1984) Assistant Professor, Mathematics
B.A., Tufts University; Ed.D., University of Massachusetts

MATTEO ROVETTO (1966) Professor, Foreign Languages and Literatures
B.A., Utica College; M.A., D.M.L., Middlebury College

ROBERT SAISI (1967) Professor, Education
B.A., M.Ed., University of Maine; Ed.D., Boston University

FRANK A. SALVIDIO (1967) Associate Professor, English
B.S., Columbia University; M.A., American International College; M.A., Ph.D., University of Connecticut

G. FRANK SAMMIS (1971) Assistant Professor, Education
B.S.E., Boston University; M.Ed., University of Maine; Ph.D., University of Connecticut

NAPOLEON N. SANCHEZ (1972) Professor, Foreign Languages and Literatures
B.A., Westfield State College; M.A., Ph.D., University of Massachusetts

SAMUEL T. SCOTT (1971) Associate Professor, Physical Science
B.S., Massachusetts Institute of Technology; M.A., Ph.D., Boston University

CATHERINE B. SHANNON (1967) Professor, History
B.A., University of Toronto; M.A., National University of Ireland; Ph.D., University of Massachusetts

PHILIP C. SHEPARDSON (1966) Professor, English
B.A., M.A., Ph.D., University of Massachusetts

JOHN SONGDAHL (1982) Associate Professor, Biology
A.B., State University of New York at Cortland; M.S., University of Miami; Ph.D., University of Rhode Island; M.B.A., Nichols College

STEPHEN C. SOSSAMAN (1975) Assistant Professor, English
B.A., Columbia University; M.A., State University of New York at Stony Brook

BRIAN STEINBERG (1978) Associate Professor, Political Science
B.A., University of Connecticut; M.A., University of Wisconsin; Ph.D., New York University

HAROLD EDWARD STESSEL (1986) Assistant Professor, English
B.A., University of North Carolina; M.A., University of Chicago; Ph.D., University of Pennsylvania

JACK SZPILER (1977) Associate Professor, Psychology
B.A., University of Dayton; M.S., Ed.D., University of Massachusetts

BEVERLY D. TATUM (1983) Associate Professor, Psychology
B.A., Wesleyan University; M.A., Ph.D., University of Michigan

J. KENNETH TAYLOR (1956) Professor, Biology
B.S.E., Bridgewater State College; M.A., Columbia University

GERALD E. TETRAULT (1967) Professor, Philosophy
A.B., M.A., Boston University

OOMMEN THOMAS (1980) Assistant Professor, Economics/Business Administration
B.A., Sid College, Kerala, India; M.A., Aligarh Muslim University; M.B.A., Western New England College

JOSEPH J. TOBIA (1970) Assistant Professor, Mass Communication
B.S.E., State University of New York at Fredonia; M.S., Syracuse University

R. FREDERICK TWENTER (1969) Professor, History
B.A., Kansas State College; M.A., Ph.D., University of Connecticut

MARTHA van ALLEN (1970) Professor, Health, Physical Education, Recreation and Dance
B.S., Cortland College; M.Ed., St. Lawrence University; D.P.E., Springfield College

CAROL L. VERMILLION (1967) Assistant Professor, Health, Physical Education, Recreation and Dance
B.S., M.Ed., Kent State College

DAVID E. VINCENT (1966) Associate Professor, Geography and Regional Planning
B.S.E., Salem State College; M.A., Clark University

CARMELA VIRGILIO (1968) Professor, Health, Physical Education, Recreation and Dance
B.Ed., Rhode Island College; M.S., Springfield College; Ed.D., Boston University

JOHN R. WAGNER (1986) Associate Professor, Economics/Business Administration
B.A., Kutztown University; M.A., Ph.D., Temple University

SUZANNE M. WALSH (1984) Assistant Professor, Biology
B.S., Kutztown State University; M.S., Ph.D., West Virginia University

HENRY WEFING (1985) Assistant Professor, English
A.B., St. Peter's College; M.A., Duke University

BARBARA A. WELCH (1968) Professor, English
B.A., Newton College; M.A., Boston College; Ph.D., University of Michigan

TERESA WU (1982) Assistant Professor, Computer and Information Science
B.A., National Taiwan Normal University, Taipei, Taiwan, Republic of China; M.Ed., M.S., Ohio University

MICHAEL A. YOUNG (1984) Assistant Professor, Physical Science
B.S., B.A., M.S., University of Minnesota; M.S., University of Massachusetts

LIBRARIANS

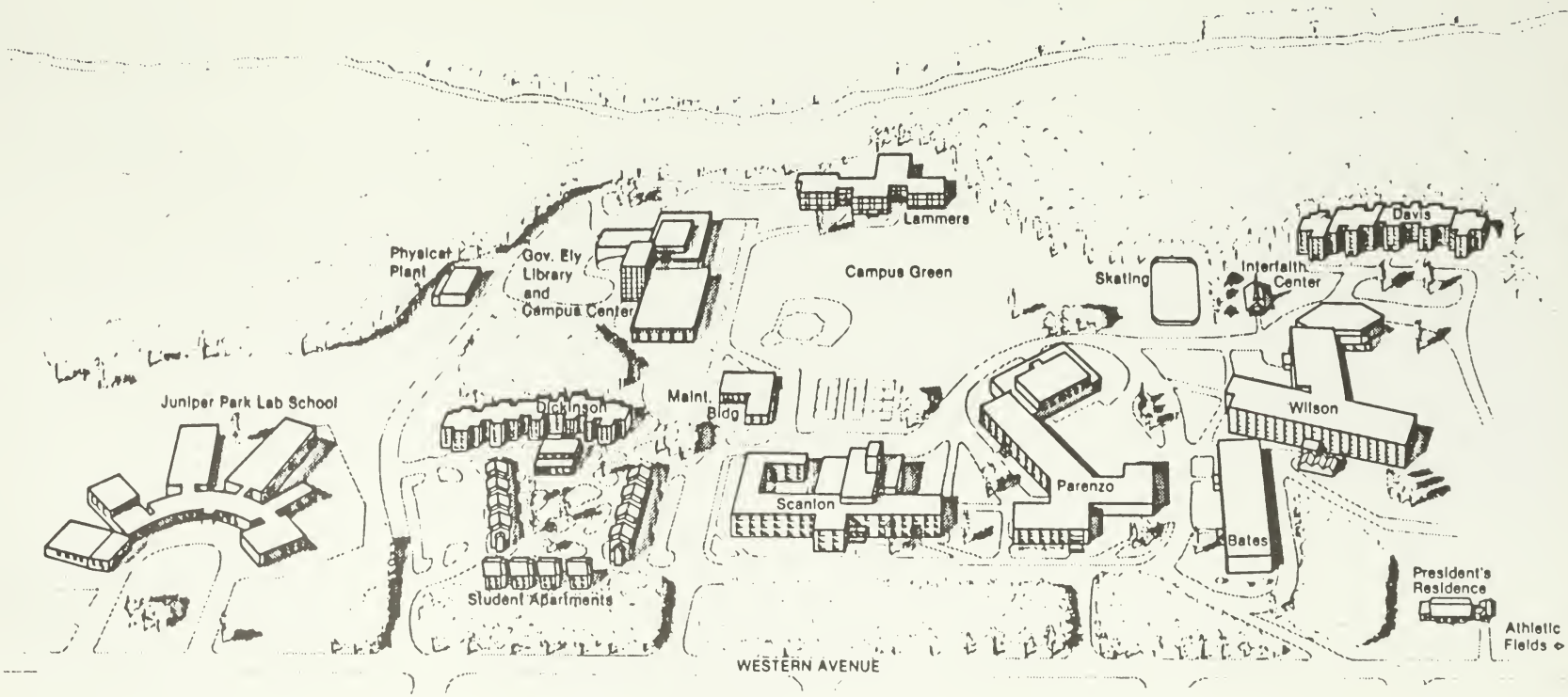
KENNETH W. COTTON (1966) Director of Library
B.A., University of New Hampshire; M.A., Ohio University; M.S.L.S., Simmons College

ROBERT J. BLOUIN (1986) Assistant Librarian
B.A., University of Connecticut; M.L.S., Rutgers University

CATHERINE H. HANDY (1969) Librarian
B.A., University of Massachusetts; M.S.L.S., Southern Connecticut State College

KATHERINE E. HIGGINS (1970) Associate Librarian
B.A., Boston University; M.S.L.S., Texas Women's University

JEANNINE UPPGARD (1976) Assistant Librarian
B.A., Rivier College; M.L.S., State University of New York at Geneseo; M.B.A., Western New England College


Physical Plant
Gov. Ely Library and Campus Center
Lammers
Campus Green
Skating
Interfaith Center
Davis
Juniper Park Lab School
Dickinson
Maint. Bldg
Wilson
Scanlon
Parenzo
Bates
Student Apartments
President's Residence
Athletic Fields
WESTERN AVENUE

Office of Admission
Westfield State College
Westfield, Mass. 01086
1-800-322-8401
(413) 568-3311